

Döne k'aʔa hazq eʔek'e ɛts'et'e gha nit'e hol

Gots'éʔóné ʔelehk'é ʔets'edut'e gha goʔedíht'e

Dene zhatié kádeʔa eʔek'ée egedut'éh ts'énádagodhe gha
ediht'éh hól

T'at'ú Dēne Yatí T'á ʔeret'ís Xasí Xa ʔereht'ís Hál

Dinjii zhuh ginjik datthak nihk'ít atr'adant'oo gugwindàk

Reports of the Dene Standardization Project

1990



The Dene Standardization Project

Reports

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INTRODUCTION

The Dene Standardization Project, a joint effort of the Departments of Culture and Communications and Education, Government of the Northwest Territories, has completed its task of standardizing the writing systems for the Dene languages spoken in the Northwest Territories.

We would like to take this opportunity to express our sincere gratitude to all those who participated in the project, either by attending meetings, or writing these reports. We would like to especially thank the following individuals:

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1. The Dene Standardization Project - Background

The idea of standardizing the writing systems used by the speakers of the five Athapaskan or Dene languages of the Northwest Territories is not a new one. In 1976, the Inuit Cultural Institute Language Commission standardized the alphabetic (or Roman) and syllabic writing systems used by speakers of Inuktitut in the North. The usefulness of a standard set of characters and writing conventions for representing spoken Dene was first realized by the Athapaskan Languages Steering Committee in the 1970's and reiterated at the Bilingual Education Conference at Inuvik in 1982, and at a subsequent conference on education at Fort Smith in 1984. In the fall of 1985, the territorial government instituted the Task Force on Aboriginal Languages, which tabled its report in 1986. This commission recommended that the writing systems used for the northern Dene languages be standardized within ten years. The official government response to this recommendation indicated its willingness to undertake this task;

"The Government agrees that a concentrated effort must be made in respect to standardization and the Language Bureau is presently developing a budget proposal to fund development of standardized written Dene Languages. The budget plan would allow Government and organizations and individuals outside Government to form a commission or task force beginning in 1987 which will be assigned the responsibility of consultation and development of a process for standardization." (GNWT:1986:10)

As a result, the Dene Standardization Project was initiated in 1987. It was conceived as a one year project with the mandate of making recommendations on orthography standardization, as the first step in the process of encouraging widespread native language literacy, the publication of native language materials, and ultimately the preservation of the Dene languages in a technological era which places high demands for literacy and depends on the print media for the retention and transmission of information.

The Dene Standardization Project was funded under monies made available through the 1984 Canada-NWT Languages Agreement. After joint discussions between the Departments of Education and Culture and Communications (GNWT), a Planning Committee comprised of five representatives from these departments, and five linguists, was set up. The members of the Planning Committee were selected to represent each of the five Dene languages spoken in the Northwest Territories: Gwich'in, North Slavey, South Slavey, Chipewyan and Dogrib. Each member of the Planning Committee had either undertaken linguistic research on one of these Dene languages or was a fluent and literate native speaker. The Planning Committee representatives selected five members from each language group, including elders, to sit on Working Committees. The purpose of the Working Committees was to provide a forum in which the various writing systems in use could be discussed, evaluated and revised. The Working Committees held three or four meetings for each language group. After each meeting, a technical report summarizing the results of the community level discussions was submitted by the respective linguist. The Planning Committee met three times over the year long period to consolidate the results of the technical reports, and reported its results directly to the Department of Culture and Communications, which informed the Department of Education of the progress of the project.

A final meeting of the Planning Committee and representatives from the Working Committees was held in October, 1988 to consolidate the recommendations of the five language groups.

Final reports containing technical information and pedagogical guidelines for literacy training were drafted, and is being tabled at the Fall session, 1989.

2. The Dene Languages and Writing Systems

The five Dene languages spoken in the Northwest Territories are Gwich'in (formerly known as Loucheux), South Slavey, North Slavey, Chipewyan and Dogrib. There are speakers of South Slavey in B.C., the Yukon and Alberta, of Gwich'in in the Yukon and Alaska, and of Chipewyan in Alberta, Manitoba and Saskatchewan. These five languages are related to other Dene languages in North America such as Chilcotin, Sekani and Beaver spoken in British Columbia, Sarsi spoken in Alberta, and Navajo and Apache spoken in the southwestern United States.

A syllabic writing system was introduced to the Dene people of the North by missionaries in the 19th century. This system was based on the system originally developed for Cree and Ojibwe and adapted to Inuktitut. There are still older people living who can read and write in syllabics, and there are many archival materials written using the syllabic script. Today, however, most literate Dene speakers are more familiar with the alphabetic writing systems developed over the last twenty years.

The syllabic system which was adapted for Dene languages was an incomplete system since many sounds were not represented in the syllabary. The system was useable only by fluent speakers who could figure out the written words because they understood the context of the text which, in most cases, was primarily either religious or a personal record. In order to use syllabics today to teach native language literacy, the system would require extensive revision to accurately reflect spoken Dene. Without such revision, it would not be possible to teach children learning a Dene language as a second language how to read and write.

Since reasonably accurate alphabetic writing systems have been developed and used successfully by children learning to speak Dene, by educators, by translators, and by fluent Dene speakers, for the last two decades, it seemed more feasible to the Dene Standardization Project to concentrate on refining and standardizing the alphabetic writing system. A further motive for preferring the alphabetic system to the syllabic system is that the majority of native language speakers in North America use an alphabetic system, for example for Mohawk, Tsimshian, Micmac. Speakers of other Dene languages also use an alphabetic system, for example for Navajo, Chilcotin, Sarsi. Finally, even for the languages for which syllabics are used in some regions, an alphabetic system is widely used in other regions, as in the case of Cree, Ojibwe, Inuinnaqtun.

The use of an alphabetic writing system also enhances the cultural distinctiveness of the Dene people. If the syllabic system were to be adapted, the writing systems for the Dene languages would resemble very closely written Inuktitut, since the same syllabic characters and diacritics (finals) would be utilized. More practically, fewer typesetting difficulties are encountered with the use of an alphabetic system, and, for children who are literate in English, an alphabetic writing system for Dene is more easily learnt than a syllabic system.

3. The Dene Alphabetic System

The basic principle underlying an alphabetic writing system is that there is a one-to-one correspondence between a symbol and a sound. The alphabetic writing systems developed for the Dene languages are based on this principle, and use basically the same letters of the Roman or Latin alphabet as are used to write English. However, the Dene writing systems are more systematic than the English writing system, since, when you write in Dene, you generally spell a word exactly as it sounds. In English, which has a much less systematic writing system, different letters may represent the same sound. For example, the underlined letters in the following English words represent the same sound: to, too, two, through, threw, clue, shoe, suit, coup. In English, the same letter can represent different sounds: dame, dad father, call, sofa, many. Sometimes in English, letters represent no sound at all: though, often, bomb, make, knife, ptarmigan.

The Dene writing systems are more systematic than English because one sound is always represented by the same symbol. An example may help to illustrate this point. In English, there are two different sounds which are both written th. The different pronunciations of the words either and ether show that there are, in fact, two different sounds represented by the same symbol th. In Dene, which also has these two sounds, we use two different symbols: th for the sound in ether, and dh for the sound in either. The th sound is always written as th, and the dh sound is always written as dh, without any exceptions. Some examples of these two sounds are given below, as they would be written in Chipewyan:

sedhá	my mouth
seʔádhé	my hip
sek'oth	my neck

It is not surprising that a child learning to read and write in English requires many years to master the writing system, and that so many adults are poor spellers or illiterate. The Dene writing systems, in contrast, are easily learned. Students learning to write in Dene have little difficulty in spelling correctly provided they learn the alphabet symbols, correctly match up what sounds are heard with the appropriate symbol, and learn a small set of simple writing rules.

At present, literate Dene speakers basically write words exactly how they pronounce them. As noted earlier, it is very easy to learn and to teach Dene literacy since the writing system reflects spoken Dene closely. However, even literate speakers often have problems deciding where to make word breaks, whether to use quotation marks, and so forth. A further problem with the Dene writing systems as they are currently in use, is that two people from the same community may write the same word differently, depending on their individual pronunciations. For example, within one South Slavey community, one speaker may say fáanidhe "I died", while another speaker may say fáandidhe "I died". In this case, although both speakers are saying exactly the same word, because they pronounce the word differently, they write the word differently. This problem is compounded when speakers from different communities are considered. In this case, speakers in one community may have different pronunciations of the same word when compared to speakers in another community. For example, speakers of Gwich'in in Old Crow say nitshih, while speakers of Gwich'in in Fort McPherson say nichih for "rosehips".

For some Dene language groups there are, at present, competing alphabetic systems and different spelling practices. This is due to the fact that various systems have been proposed and taught at different times, and also due to the fact that, since Dene is written exactly as it sounds, different communities, or even different individuals within the same community, may write words differently. For example, Gwich'in has at present three alphabetic systems in use: the McDonald orthography, which is the oldest system; the new or "Ritter" orthography, which is a more recently introduced system used in the Yukon and the Northwest Territories; and the Alaskan orthography used in Alaska.

In addition to the fact that there are competing alphabets in use, there has never been sufficient discussion nor any definite decisions taken with respect to writing conventions such as how to write compound words, punctuation, or which forms to use in dictionaries.

A further problem encountered by those using a Dene writing system is how to represent the difference in speech between younger and older speakers. The speech of the younger members of most communities often show many contracted (or shortened) forms, in comparison with the longer forms used by elders. Because of this, younger speakers may write the same words differently than older speakers, because people have been taught to write as they pronounce.

Because there have never been uniform systems for writing the Dene languages, written communication between speakers both within and between communities is more difficult than is necessary. Furthermore, the movement of native language teachers has been restricted between communities. The cost of production of curriculum materials has been higher than would be required were a uniform writing system adopted for each language. At present, materials must be produced for each dialect group, and these materials cannot be freely exchanged between communities.

The challenge for the Dene Standardization Project has been to decide between varying systems for each language, and, within each language group, to decide between the varying systems for each dialect. A further challenge has been to make sure, in deciding on a system, that the system chosen is systematic. This means that the writing systems must have symbols for all of the sounds which are recognized as distinct sounds by speakers of that language. Furthermore, the writing system must not represent information which is not meaningful to speakers. The final, and major challenge to the Dene Standardization Project, has been to resolve the problem of choosing alphabets and writing conventions for each language which conform to a standard across all five Dene languages.

4. What is Standardization?

There are differences in the speech of all speakers of a language. These differences are due to geography (which community a speaker is from), or due to social groupings (whether a speaker is a youth or an elder), or due to social context (whether a speaker is giving a religious speech, or meeting a friend on the street). The task of the Dene Standardization Project was to select writing systems and rules for writing that could accommodate these differences for each language group, and yet could bring about greater unity and best promote literacy and language retention within the Dene communities.

Four different types of standardization were discussed by the various Working Committees of the Dene Standardization Project. The first type, community standardization, involved selecting a writing system which would be uniform for all speakers within a community, but which would not reflect individual differences in pronunciation between the speakers of one community. The second type, regional standardization, involved choosing a writing system which would be uniform for all speakers within a region, but which would not reflect differences in pronunciation between speakers in different communities. The third type, territorial standardization meant opting for a system which would lead to uniform alphabets and writing conventions across all five northern Dene languages. The fourth type, pan-Dene standardization involved selecting a system which would lead to uniformity with respect to alphabets and writing practices across all Dene languages. In general, most of the recommendations of the Dene Standardization project reflect the choice of the Working Committees to strive toward community standardization, and ideally if possible, toward regional standardization of the orthographies for each language group.

A further issue which concerned the Dene Standardization Project was how best to reflect social and stylistic differences in speech. The general consensus of all Working Committees was that, in all cases, the speech of elders should be chosen as the standard in writing. Furthermore, it was agreed that formal rather than colloquial speech should be chosen as the basis upon which a written standard would be based.

5. Why Standardize the Writing Systems?

The benefits of standardizing the writing systems are readily apparent. First, a standard writing system which is adapted and utilized by native speakers will eventually, over time, preserve conservative forms of speech, i.e. the speech of elders. This, for many Dene people, is of great cultural value and importance. Second, if speakers of one language use only one standard writing system, rather than two or three different systems, it is easier to both teach and to learn literacy in the native language. Third, more curriculum materials should become available to schools, more cost-effectively, since similar materials would no longer need to be duplicated in the several different writing systems for one language. Fourth, translations of both governmental and nongovernmental documents would be more accurately and efficiently completed if translators used one standard writing system for their particular language. Fifth, standardizing the writing systems used by northern Dene speakers could ideally bring about conformity with the writing systems already in use by non-northern Dene speakers, such as the Gwich'in of Alaska or the Navajo of New Mexico. This would facilitate the exchange of information between North American Dene speakers and prove a boon to the peoples of the North who would then draw on the wealth of educational and research materials published outside of the Northwest Territories.

Uniform, standard orthographies will facilitate the production of printed materials in the Dene languages. The availability of a greater quantity and variety of published materials will promote Dene literacy and literature, and facilitate the use of Dene languages in both the public and private sectors.

The costs of delivery of government services will be greatly reduced if the production of printed materials is limited to meet regional rather than community demands. At present, the delivery of services is restricted and complicated by the fact that there are competing writing systems in use between and within communities.

The five Dene languages of the Northwest Territories are recognized as official languages under the Official Languages Act (1984, rev. 1986). The Government of the Northwest Territories has committed support to promote, develop and enhance the indigenous languages of the North. The standardization of the writing systems of the Dene languages will assist in this task, since it will unify speakers of each language and reflect the similarities across all languages. It will contribute to the maintenance of cultural distinctiveness, and, since literacy promotes personal and social development, will contribute to the retention of aboriginal culture, while enabling the individual to take part in an advanced industrial society. It is absolutely imperative that the writing systems be standardized if a literate Dene population is ever to become a reality.

6. What Recommendations Were Made?

The Dene Standardization Project spent many hours discussing and documenting a large number of complex problems related to the various writing systems in use. For each language group, a set of standard alphabet symbols was defined. Questions concerning writing conventions were discussed, and various problems related to punctuation and word junctures were examined. The Dene Standardization Project resolved that the speech of elders versus the speech of younger speakers should be encoded in the writing systems. Speech differences both within and between communities were discussed, and decisions taken on how best to represent these differences.

The Dene Standardization Project reached a consensus on twenty-seven recommendations for standardization of the writing systems which would apply across the five Dene languages. The recommendations are included as an appendix to this summary.

7. Implementation - Recommendations

The Dene Standardization Project has made a number of practical recommendations which should be implemented. Since it is anticipated that further problems and issues may arise with respect to the standardized orthographies, it was recommended that the Dene Languages Committee be set up in consultation with the Dene Cultural Institute. This standing committee would be empowered to make decisions regarding the standard orthographies.

Since literacy can only be achieved through training, there must be funding allocated for the training of native language specialists and teachers, and for the retraining of literate speakers who will have to revise their writing habits. It is recommended that community literacy workshops be funded. It is recommended that literacy workshops be held during working hours for government employees. It is further recommended that a compulsory native language literacy component be included in adult education.

The publication of reference materials such as dictionaries and teaching grammars are required in order to promote and use the standard orthographies. There must be funding in place for the development of native language curriculum materials for the primary and secondary levels, and funds made available for the revision of existing materials in the standard orthographies. Regional resource centres with permanent coordinators and support staff must be established to delivery literacy training and to make available reference and teaching materials to aid in the promotion of literacy. It is perceived that the Centres for Teaching and Learning could fulfil this function, however, long-term funding for staff and for the collection and cataloguing of materials is definitely required.

Provision must be made for the Dene languages to be taught as second languages to adults and children who do not speak these languages as a first language. This instruction must include literacy training using the standard orthographies. These programs could be delivered through the school and adult education systems already in place in the North.

Funding must be allocated for further linguistic research on matters such as dialect differences, the speech of elders, and first language acquisition. Since regional standardization is ideally recommended by the Dene Standardization Project, dialect surveys are required. Since the speech of elders has been identified as the standard by the Dene Standardization Project, this speech must be recorded. Furthermore, training in linguistics is necessary for native language specialists in order to accurately and efficiently develop reference and teaching materials. In addition, younger speakers who lack linguistics training may encounter difficulties in perceiving differences between their own speech and the speech of elders. If the speech of elders is taken as the standard, younger speakers must be trained to perceive and document these differences.

The Dene Standardization Project recommends that all places which have traditional Dene names be renamed in Dene, and spelled in the standard orthographies. All signs should be revised to reflect standard orthographies. All decisions taken by the territorial toponymist regarding placename spellings should be ratified by the Dene Languages Committee. The traditional placenames and standard spellings should be officially recognized by the territorial and federal governments.

Artists and writers in the communities should be employed to develop material using the standard orthographies. The literary achievements of Dene people must be recognized to encourage the publication of a variety of printed material.

All of the recommendations of the Dene Standardization Project require a definite, long-term funding commitment from the Government of the Northwest Territories.

8. Implementation - Time Frame

The first phase in the ten year process of standardizing the writing systems for the Dene languages has been completed by the Dene Standardization Project. The various writing systems have been discussed by fluent native speakers at the community level. Linguistic research on the varying systems has been conducted, and, in concert with native speakers, recommendations have been set forth concerning the standard to be used for each language. The choice of a standard to be used for each language has been guided by the principle of selecting symbols and conventions which lead to more uniform orthographies across all five Dene languages.

The second phase in the ten year process has also been completed. This phase involved consulting with and soliciting of, other interest groups such as the Dene Cultural Institute, the Centres for Teaching and Learning, native language teachers and specialists, and the various local and regional native organizations in the North. The proposed standard writing systems were presented to these interest groups, and their criticism incorporated in determining what final decisions to take.

Final decisions on the orthographies have been made by the Planning Committee. The third phase of the process involves official recognition of the standard writing systems by the Legislative Assembly of the Northwest Territories. This official recognition should include the sole use of the standard official orthographies in the schools, and in all government publications which are disseminated in a native language.

The fourth phase of the process involves an intensive public awareness and literacy campaign, to introduce the standard orthographies to the public, and to train native language speakers in the use of the standard orthographies. A great deal more material must be published, and a wider variety of material is needed, in order to increase public awareness, and to motivate and stimulate literacy. Teachers must be trained to teach literacy using the standard orthographies, and, as mentioned earlier, some retraining may be necessary for already literate Dene speakers who work in the fields of education and interpreting.

The fifth, and final phase would be a review by the Dene Languages Committee midway in the ten year process. At this time, literate speakers would report on any unresolved issues, and the appropriate revisions to the standard writing systems would be made. It is expected that these revisions would be relatively minor, and not require extensive changes to published materials, nor intensive retraining of literate speakers.

The ten year process has the following time frame:

Phase One (1987-88) Dene Standardization Project: review existing orthographies and conventions and recommend standards.

Phase Two (1988-89) Consultation with Interest Groups: solicit feedback and support from northern interest groups.

Phase Three (1989-90) Official Recognition of Orthographies: Planning Committee makes final decisions on writing systems; decisions ratified by Legislative Assembly.

Phase Four (1990-95) Public Awareness and Literacy Campaign: introduction of standard systems to the public; training; development and publication of reference and teaching materials in standard orthographies.

Phase Five (1995-96) Review: a review of the standard orthographies by the Dene Languages Committee; revisions of writing systems; continuation of public awareness and literacy campaign.

The ten year process of standardization requires the full commitment of the Government of the Northwest Territories, both philosophically and financially. In fact, the people of the Northwest Territories must commit this support, for two reasons. First, the Dene people of the Northwest Territories have made it known, through their response to the Task Force on Aboriginal Languages, that it is their strong desire that the writing systems be standardized; and second, without the support of the government and people of the Northwest Territories, the Dene languages of the Northwest Territories are further endangered.

The participants in the Dene Standardization Project are united in their recommendation that the Government of the Northwest Territories act quickly in guaranteeing its commitment to the ten year process of standardization. If the process is delayed, it may become difficult or impossible to attain the goal of standardized writing systems and full literacy. The longer writing systems are used, the more deeply entrenched they become, and the more difficult it becomes for literate speakers to change their writing habits, both emotionally and practically. At the present time, the participants in the Dene Standardization Project have been able to compromise, and reach a consensus on many complex and difficult issues. This spirit of cooperation and mutual endeavour must be fostered and encouraged through the immediate commitment of the territorial government.

APPENDIX - RECOMMENDATIONS SPECIFIC TO THE ORTHOGRAPHIES

1.0 Use conservative (older) forms of speech as the standard in writing.

Following this recommendation would lead Chipewyan writers, for example, to prefer the spelling bethchënë, which reflects the pronunciation of older speakers, to the spelling beschënë, or beshchënë, or behchënë, which reflect the pronunciations of younger speakers.

2.0 Alternate pronunciations

2.1 Always write the full rather than the contracted forms of words.

This recommendation entails that, in Gwich'in for example, the first rather than the second spellings given below would be preferred:

gwitr'it	tr'it
nagoonjik	naonjik
nihkhahgijilch'aai	nikhajilch'aai

2.2 Always write the formal form of words. Informal forms of words may be introduced later in the classroom.

2.3 In cases of geographical dialect variants, write a word as it is pronounced for each dialect.

This recommendation entails, for example, that the North Slavey word for "rock" would have three different spellings depending on which community the writer was from:

Fort Franklin	kwé
Fort Norman	pé
Fort Good Hope	fé

(It should be noted that this recommendation is slightly more complex than stated here. First, in North Slavey, the Fort Franklin and Fort Norman pronunciations are to be taken as the standard in a specific case of variation in the pronunciation of three consonants. Second, in Gwich'in, the Old Crow dialect is to be taken as the standard in the cases where there is variation in the pronunciation of certain consonants, and in the case of the pronunciation of one specific prefix. In both of these cases, these dialects preserve the older forms of speech.)

3.0 Dene Alphabet Symbols

3.1 The same alphabet symbols will be used to represent vowels, tone, and, consonants in Chipewyan, Dogrib, North Slavey and South Slavey.

- 3.2 The alphabet symbols used to represent vowels, tone and consonants in Gwich'in are, in most cases, uniform with those used for the other Dene languages. It was decided by the Gwich'in Working Committee and the Planning Committee that the Gwich'in writing system should be standardized with the writing systems in use in the Yukon and Alaska.

- 3.3 The symbols <th> <dh> <tth> <ddh> and <tth'> will be used.

This recommendation leads, for example, to the following Chipewyan spellings, in which the first spellings are preferred to the second spellings:

thá	Oá	"lor ʔ"
bedhá	bedá	"his/her mouth"
ʔetthën	ʔetoën	"caribou"
tth'ën	to'ën	"bone"
ʔeɬddháy	ʔeɬddáy	"dry fish"

- 3.4 The symbol <gh> will be used.

This recommendation means that the first, rather than the second spelling, is preferred in Chipewyan:

ghá	gá	"for"
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- 3.5 Always, and only, write high tone for South Slavey, North Slavey and Chipewyan. Always, and only, write low tone for Dogrib and Gwich'in.

This recommendation leads to the following spellings:

Chipewyan	shíh	"mountain"
Dogrib	shih	"mountain"
South Slavey	shíh	"mountain"
North Slavey	shíh	"mountain"
Gwich'in	shih	"meat"

- 3.6 The vowel in Chipewyan which sounds like the u sound in the English word but will be written <ě>.

This leads to the spellings given below for Chipewyan~

deɬddhër	"rattle"
nédhël	"it is hot/warm"

- 3.7 The vowel in North Slavey which sounds like the a sound in the English word mate will be written <ə>.**

This leads to the spellings given below for North Slavey:

déghə	"it is calm"
kwə	"rock"

4.0 Use of Symbols

- 4.1 Use the symbol <gh> whenever some speakers in a community say a word with a -gh- pronunciation and other speakers say the same word with a -y- pronunciation. Use the symbol <gh> whenever some speakers in a community say a word with a -gh- pronunciation and other speakers say the same word with a -w- pronunciation.**

This recommendation would lead North Slavey speakers, for example, to write words pronounced as shown in the first examples, in the same way, as shown in the second examples:

seghú, sewú	seghú	"my tooth"
déghə, déyə	déghə	"it is calm"

- 4.2 Always write a glottal stop <ʔ> when it is at the beginning of a stem.**

Following this recommendation, glottal stop would be written as shown in these South Slavey words:

meghátʃʔáh	"one gives something to him/her"
ʔah	"snowshoe"
ʔóné	"beyond it"

- 4.3 Only write nasal vowels when the nasal vowel makes a meaning difference in a word.**

This recommendation means that the following Dogrib spellings would be selected:

dze	gum
dzẽ	day

- 4.4 Write <x> rather than <h> at the beginning of a stem.**

This recommendation leads a South Slavey writer to spell the word "goose" as xah, although it can be pronounced either xah or hah.

- 4.5** In South Slavey, if a word can be pronounced either with -mb- or with -m-, choose the spelling which reflects the -m- pronunciation. If a word can be pronounced either with -nd- or with -n-, choose the spelling that reflects the -n- pronunciation.

This recommendation would lead to the words which are pronounced as indicated in the first column, being written as in the second column:

k'embe around"	k'embe	"s h e / h e s w i m s
mekóqé, mbekóqé	mekóqé	"his/her house"
tedéhmé	tedéhmé	"it flooded"

- 4.6** In Dogrib, if a word can be pronounced with either -mb- or -b-, choose the spelling which reflects the -mb- pronunciation. If a word can be pronounced with either -nd- or -d-, choose the spelling which reflects the -nd- pronunciation.

This recommendation would lead to the words which are pronounced as indicated in the first column, being written as in the second column:

mbeh, beh	mbeh	"knife"
mì	mì	"net"
libò	libò	"cup"

5.0 Word Divisions

5.1 Write a suffix as part of the word.

Following this recommendation would lead, for example, to the suffixes which mean "big" or "small" being written as follows:

(Chipewyan)

bebíaze	"little baby"
dezaze	"creek"

(South Slavey)

sahcho	"grizzly bear"
dihcho	"rooster"

5.2 Particles are to be written separately from the word.

This recommendation means that particles such as those which mean "future", "past" and "not" would be written as follows:

(Dogrib)	
shèhtı ha	"I am going to eat"
(Chipewyan)	
nádé nı	"They used to live"
(North Slavey)	
nezq yıle	"it is not good"

5.3 A postposition is to be written separately, unless it takes a prefix, or unless it is part of a verb.

This recommendation means, for example, that the postpositions in the following South Slavey examples would be written as part of the word:

negha	"for you"
gogháni?q	"I gave it to them"

The postposition would be written separately in the phrase:

tıı go?óq nezq éśıı gha	"for the best dog"
-------------------------	--------------------

5.4 The possessive pronoun prefix is to be written as part of the word.

Examples from Gwich'in and North Slavey illustrate this recommendation:

(Gwich'in)	
shikwàan'	"my fire"
kwàn'	"fire"
(North Slavey)	
sets'aré	"my hat"
t'ere ts'aré	"the girl's hat"

Chipewyan Technical Report

0. Introduction. This report deals with matters concerning: (1) the orthographic symbols; (2) the use of symbols for alternate pronunciations; (3) word divisions; and (4) punctuation.

The choice of orthographic symbols is based on two important principles in the spirit of standardization in a wider context: (i) to use the same alphabetic symbols for essentially the same sounds in other Dene languages and (ii) to reduce the number of alphabetic letters. For example, gh is chosen for g (which was used in Snowdrift) and x replaces hh in the system used by the Northern Canada Evangelical Mission. Based on the second principle, the proposed alphabet does not include any "labio-velars" from the inventory. For example, ghw and kw in heghwi 'flexible' and sekwj 'child' as spelled in some existing literature, should be spelled heghui and sekui respectively.

1. Chipewyan Alphabet

1.1 The Chipewyan alphabetic symbols are presented below in the order established for all Dene languages in the Northwest Territories. The vowels are listed in the simple (unmodified) form only in the inventory, recognizing however the fact that they may be modified by nasalization and/or tone.

ʔ	a	b	ch	ch'	d	dh	ddh	dl	dz	e
ë	g	gh	h	i	j	k	k'	l	ł	m
n	o	r	s	sh	t	t'	th	tł	tł'	ts
ts'	tth	tth'	u	w	x	y	z			

1.2 Tone. Only the high tone is marked with (') as shown in the following examples:

shěth	'mountain'	kón	'fire'
tsá	'beaver'	lidí	'tea'

However, high tone which is part of the intonation contour (e.g. high pitch on the question suffix -u, as in Tubałdhi-u), is not marked. Only the lexical tone is marked.

1.3 dh, ddh, th, tth, tth', and gh. These six symbols replace d, dd, θ, tθ, tθ', and g respectively of the system that was used in Snowdrift, e.g.

dh:	dhěth 'hide' (not dēθ)
ddh:	ʔełddháy 'dried fish' (not ʔełddáy)
th:	tha 'martin' (not θa)
tth:	tthe 'rock' (not tθe)
tth':	tth'áy 'plate' (not tθ'áy)
gh:	ʔeghézé 'egg' (not ʔegézé)

1.4 x, sh, ts, and ts'. These four symbols represent consonants that are written by hh, sy, c and c' respectively in the system developed by the Northern Canada Evangelical Mission (NCEM), e.g.

x: xál 'card' (not hhál)
 sh: shēn 'song' (syēn)
 ts: tsá 'beaver' (not cá)
 ts': ts'ich'ogh 'quill' (not ts'ic'ogh)

Note that the sound represented by x is different from the sound represented by h as in hesiēn 'I sing' and hetsagh 'he cries'.

1.5 Labialized consonants: The NCEM system also includes such consonants as ghw and kw which are eliminated by writing them as ghu and ku respectively, e.g.

heghui 'flexible' (not heghwi)
 sekui 'child' (not sekwi)
 cf. ts'elt'ui 'cigarette' (not ts'eltw'i)

1.6 Short vowel ē. The Chipewyan vowels include five long vowels which may also be nasalized and a short vowel ē. In the old syllabic orthography this vowel is not recognized as it is identified as ε. On the other hand, the NCEM recognizes a short vowel written by Greek letter epsilon, [ε]. However, the Greek letter in the NCEM system represents not only the short vowel which is always short, i.e. ē, but also a shortened long vowel, ε. In other words, the long vowel ε may be optionally shortened in prefixes and in word final position. Consequently, the Greek letter is used very frequently and unnecessarily in the NCEM system. It is decided that the shortened long vowel be written as ε and ē is used for the short vowel which is always short, e.g.

ē: shēn, 'song'
 dzēn 'muskrat'
 tēn 'ice'
 e: selá 'my hand' (not sεlá)
 dēne 'man' (not dεnε)

1.7 The "diphthongs" include the following two pairs, ue vs. ui and ai vs. ay, and au and ie which are rare, e.g.

ue: fue 'fish', due 'very'
 ui: ts'ákui 'old woman', ts'élt'ui 'cigarette'
 ai: k'ái 'willow', ts'ailli 'frog'
 ay: tth'áy 'dish', ʔay 'snowshoe'
 au: dáúdi 'nothing' (cf. dódí)
 ie: denié 'bull moose'

In the speech of some younger generations, the distinction between ai and ay has disappeared, but they are well maintained as two distinct sounds in the conservative speech. au is also maintained only in the conservative speech, although it may arise in the innovative speech when a verb ends in a followed by the question suffix -u.

1.8 Glottal stop. Glottal stop is written wherever it is present either in prefixes (epenthetic) or stems (underlying), e.g.

In stems: ɣay 'snowshoe', láɣane 'ring'

In prefixes: ɣene 'my mother', ɣetth'ën 'bone'

2. Alternate Pronunciation/spelling

Three types of alternative pronunciations are recognized. The first category of alternate pronunciations may be called dialect variations in a broader sense (see 2.1). The second category is stylistic variation (e.g. formal vs. casual, written vs. colloquial), and the third is due to assimilation in connected speech.

2.1 The most common are alternations in vowels. The following are most frequently observed.

i vs e: dejúli/dejúde 'mosquito', tɬ'uli/tɬ'ule 'rope'

u vs a: yunéth/yanéth 'future', yuní/yaní 'past'

o vs u: kón/kún 'fire', thóth/thúth 'spear'

o vs a: horelyú/harelyú 'all'

Consonantal alterations are rare, but the following examples are noted:

ɟ vs h vs g: ɣurádzi/hurádzi/gurádzi 'spider'

ɬ' vs ɟ t'á/ɣá 'because' (e.g. ɣeyit'á/ɣá 'because of that')

All of these alternate pronunciations/spellings are recognized as equally valid.

2.2 The use of gh. The word final gh is pronounced in three different ways, although an individual may have only one or two alternate pronunciations. For example, hetsagh '(s)he cries' is pronounced as hetsaa, hetsagh, or hetsax. The final gh, which reflects historical reality, is adopted to accommodate the variable pronunciations.

2.3 Stylistic variations involve mostly shortening in the informal/colloquial styles. Compare the pairs given below:

Formal

ts'áku

ɣenethékui/ɣenékui

horelyú/harelyú

t'á/ɣá

dedháy

Casual/Colloquial

ts'áku

ɣenéku

halyú/ɣayú

rá

dedhá

ʔɪ́fághe	fághe/fá
dɥhɥ	dɥ
ts'éré	ts'ér
ni-u	nu
tth'i-u	tth'u

2.4 A fourth type of alternation is due to assimilation in fast (connected) speech, e.g.

<u>Basic/underlying</u>	<u>Assimilated</u>
hesjën	heshjën
bethch'ënë	beshchënë

In these cases, the basic/underlying spelling must be adopted although the word may be pronounced in two different ways.

There is an important point to be made with respect to the alternate pronunciations bethchené and beshchené. A third pronunciation for this word is behchené where the second consonant is neither th nor sh, but h. This h is not due to assimilation, but to the change of th to h in the colloquial style of the younger generation. Therefore, this word is pronounced in three different ways although spelling is standardized.

3. Word Divisions

3.1 Compounds. Compound nouns are basically in two different types: (i) those that consist of two independent words, and (ii) those that consist of one independent word plus a noun or verb root that cannot constitute a word by itself, e.g.

- (i) k'its'í 'birch boat', tsá dëlé 'beaver blood'
- (ii) ʔetthënké (ʔetthën + -ké) 'caribou feet',
t'áʔih (-t'á + ʔih) 'pants'

For category (ii), the compounds are written as one word because one of the two elements cannot stand by itself. For category (i), however, it can be written as one word or two words. If the meaning of the compound is transparent, derivable from the meaning of each constituent of the compound, then it is written as two words. However, if the compound has a unique meaning which cannot be derived from the meaning of the two constituents, then the compound is written as one word. The contrast is illustrated by the following pair:

two words:	tsá dhéth 'beaver skin'
one word:	tsádhéth 'a pelt of any kind'

Although rare, there is another category of compounds which consists of category (ii) above plus another root, i.e. a word plus two roots. It is decided that this type of long compound be written with a hyphen before the last root, so that the identity of the compound can be easily recognized.

fueththén-t'éth 'cooked fish meat'

ʔetthénthú-lá 'caribou tongue tip'

Note that descriptive nouns, nouns that are equivalent to a full sentence are not considered compounds in this report. Since such nominal expressions are structurally equivalent to a sentence, no further comment is necessary, e.g.

t'así hena 'something is living (sentence)
'living thing, organism (noun)

dēne dēl net' 'a person's blood is examined' (sentence)
'serology' (noun)

3.2 Particles (enclitics). Five subcategories of elements are discussed in this subsection.

3.2.1 Conjunctions. Of the two conjunctions, chu is used to conjoin nominals only, but -u is much more versatile in its distribution and function, e.g.

chu: setá chu betá chu 'my father and his father'

-u: dēneyu-u, ts'ékui-u 'men and women' (after noun)

ʔeyi tʔa-u 'after this, then' (after postposition)

Gah heheʔi-u di tth' heheʔi 'they saw a rabbit, they also saw a chicken'

tu baɬdhi-u 'Are you thirsty?' (marking yes-no questions)

In the existing literature, chu is considered a word and -u a suffix. This practice will be continued.

3.2.2 Negative particle. This enclitic is considered a word in a formal style in which it appears as a word. In most of the other cases, this particle is contracted with what precedes, e.g.

híle: nechá híle (very formal)

-íle: necháíle (normal)

-le: nechíle (informal, most casual)

It is decided that the negative particle be written as a word or affixed to another word as the case may be. Note that the negative particle may be affixed not only to a verb but also to another particle, e.g.

dų thá hesna xaile 'I am not going to live long'

3.2.3 Tense/mode particles. These particles include xa (future/intention), ni (past/completion) and sı (emphatic), among others. These are recognized as independent words and even when two such particles occur following a verb, they are written as two separate words, e.g.

seʔekui bekása xa sı 'I'm going to go look for my uncles.'

3.2.4 Nominal particles. Augmentative -chogh and diminutive -aze are treated as suffixes regardless of their semantic function, e.g.

ʔaze 'puppy/small dog'
 beschogh 'big knife'
 ʔichoghaze 'colt/small horse (?)'
 dezaze 'creek/small river'
 deschogh 'big river'

Collective ke, on the other hand, is treated as a word. While this decision is based on intuition, it seems to agree with the distributional characteristic in that ké occurs farther from the stem following -chogh / -aze, e.g.

ʔichoghaze ké 'two colts'
 babiaze ké 'two babies'

3.3 Postpositions. Postpositions are independent words, inflected or not, just like nouns, e.g.

xél 'with'
 dəne xél 'with the man' also dəne bexél
 bexél 'with him'

A postposition or postpositional phrase is written as an independent word when a verb following it is also a word without the preceding postposition. The crucial question is whether or not the verb can stand by itself as a word without a preceding postposition. Sometimes it is clear, other times it is not. Consider the two sentences below.

- (a) Ts'ékuaze chu bə chu jé ka heʔas
- (b) Dəneyuaze chu betá chu tsá káheneta dzéheʔás

In (a) postposition ka is written as a word separate from the following verb which is a word without ka. In (b), however, the same postposition is affixed to the verb because heneta is not a word without ka. These are clear cases, but there are many unclear cases which require further research. Postpositions may also be affixed to the verb in casual connected speech as illustrated by the following examples:

(a) Formal: Yets'ën heʔas.

'They walked to him'

(b) Casual: Yets'éeʔas

While (a) is recognized as correct in formal writing, (b) should also be recognized as a possible spelling in a casual style.

Postpositions are incorporated into the verb for two reasons. First, morphologically a postposition may be an integral part of the verb theme, in which case a postposition is incorporated into (affixed to) the verb. Secondly, phonologically when the verb requires an epenthetic vowel, a postposition may be affixed to the verb. The second case is illustrated by the examples below.

(a) No incorporation:

Beka nászé xa. 'I will go
hunt for it'

(b) Incorporation:

Beká heszé xa --> Bekászé
xa.

In (a) the verb is a word with prefix ná- and no epenthetic vowel is required. In (b) there is no prefix except the epenthetic he-. Therefore, the postposition may be incorporated into the verb replacing he-.

4. Punctuation

4.1 Capital letters. Capital letters are to be used as in English. When digraphs (e.g. ts, ch) are to be capitalized, only the first letter is capitalized (e.g. Ts, Ch).

4.2 Periods, commas, quotation marks. Periods, commas, etc. are used as in English, but no quotation marks are used as they are redundant.

4.3 Diacritic marks. The superscript for tone is marked on each letter of a vowel symbol because a diphthong may have different tones (contour tone), but the subscript for nasality is marked on the first letter of a digraph because a diphthong cannot be only partially nasalized. Consider the two examples below.

kúé 'house' (not kúê or kûê)

jíe 'berry'

For 'house' the diphthong is nasalized, and it is sufficient to mark nasality on the first part of the diphthong i.e. on the letter u, because the nasality on the second part is redundant (automatic). Tone, however, should be marked on both letters of the diphthong because both (in case of 'house') or only the first part (in case of 'berry') carry high tone.

Dogrib Technical Report

Introduction

This report covers only technical matters concerning what alphabet symbols will be used in writing Dogrib, and how these symbols should be used in the case of alternate pronunciations. It also reports word divisions and punctuation.

1. On defining the Dene alphabet symbols

1.1 The Dogrib alphabet and alphabetical order

The Dogrib alphabet is listed below in alphabetical order. Each vowel is listed only in its simple form. The vowels also occur as nasal vowels, as vowels with low tone, and as nasal vowels with low tone, for instance a ą á à.

ʔ	a	b	ch	ch'	d	dl	dz	e	g	gh	gw
h	i	j	k	k'	kw	kw'	l	ł	m	mb	n
nd	o	r	s	sh	t	t'	tł	tł'	ts	ts'	w
wh	x	y	z	zh							

1.2 Tone marking

Low tone in Dogrib will be marked with (`), as in the following examples.

xà	'cards'	ts'ò	'blanket'
xhìh	'mountain'	setà	'my father'
łèt'è	'bread'	setà	'fire; house'
tsà	'beaver'		

1.3 <mb>, <nd>

Mb, **nd**, in addition to **b**, **d**, will be used in spelling by all people, because **mb** and **nd** occur as sounds distinct from **b** and **d** in the speech of some people. **B** and **D** will be used in the spelling of the words which all people pronounce alike; **mb** and **nd** will be used in the words where there is variation in pronunciation among people.

mb:	mbeh	'knife'	b:	bebà	'baby'
	sqòmba	'money'		libò	'cup'
	k'embeh	's/he is swimming'		libà	'socks'
	mbò	'meat'		libalà ʔeh	'parka'
nd:	ndi	'island'	d:	dł	'four'
	weghàehnda	'I'm looking at it'		done	'person'
	yahtindeè	'bishop'		daehta	'bed'

1.4 <m>, <n> with a vowel following

Because not all vowels following the nasal consonants **m** and **n** are nasal, nasalization on the following vowel will be written as appropriate.

m:	<i>mòla</i>	'French person'	n:	<i>netsò</i>	'to you'
	<i>lamè</i>	'mass'		<i>nàhoeghà</i>	's/he is playing cards'
	<i>mòqla</i>	'button'		<i>nòda</i>	'lynx'
	<i>mì</i>	'nets'		<i>nìhtf'è</i>	'paper'

1.5 <x>

Use **x** for noun, postposition, and verb stems. It occurs in some prefixes also.

<u>nouns:</u>	<i>xà</i>	'cards'
	<i>xo</i>	'year'
	<i>ixèq</i>	'yesterday'
<u>postpositions:</u>	<i>goxè</i>	'with us'
<u>verbs:</u>	<i>tè ehtf'è ka ts'ihxà</i>	'let's beat the carpet for dust'
	<i>mbesehxì</i>	'I'm sleepy'

1.6 Glottal stop <ʔ>

Glottal stop **ʔ** will be written as the initial letter of noun, verb, and postposition stems in Dogrib. In general it will not be written in prefixes.

ʔ written

<u>Nouns:</u>	<i>ʔah</i>	'snowshoe'
	<i>ʔeh</i>	'dress'
	<i>ʔoo</i>	'spruce boughs'
<u>Postpositions:</u>	<i>weʔò</i>	'more than it'
	<i>goʔì</i>	'behind (a house)'
<u>Verbs:</u>	<i>neʔàh</i>	'eat it!'
	<i>k'egeʔòh</i>	'they are swimming'

No 2 written

elà	'canoe'	ehtsèe	'grandfather'
eʔexè	'together'	ejie	'cow'
qhndaà	'elders'	qhchì	'bag'

1.7 The "alveo-series"

For some people, there are two contrasting series of consonants: the alveolar series, pronounced [ts, ts', dz, z, s], and the alveopalatal series, pronounced [ch, ch', j, zh, sh]. Other people have few, if any, words using sounds from the alveopalatal series of consonants - for them, the words are pronounced using a sound from the alveolar series. This situation reflects a sound change in progress. Below are some examples of words representing this variation in speech, given with their spelling in the standardized orthography.

All people pronounce [ts]

tsò	'excrement'
tso	'firewood'
ehtsì	'granny'
tsà	'beaver'

All people pronounce [ts']

ts'ah	'hat'
ts'ò	'blanket'
ts'i	'spruce'
ts'eenda	'we are living'

All people pronounce [dz]

dze	'day'
dzò	'muskrat'
edza	'it is cold'
dzè	'gum'

All people pronounce [z]

zò	'only'
eze	's/he shouts'
wewaze	'his/her saliva'
lizà	'ace'
wìzi	'her/his name'

Some pronounce [ts], others [ch]

chò	'rain'
elàcho	'barge'
seghàichi	'give it to me'
nechà	'big'

Some pronounce [ts'], others [ch']

sech'à	'away from me'
ch'o	'quills'
tòhch'ih	'slop pail'
ìch'èh	's/he is angry'

Some pronounce [dz], others [j]

ejì	's/he is breathing'
jò	'here'
ejì	's/he is singing'
agòjà	'it happened'

Some pronounce [z], others [zh]

yek'èèzhò	's/he knows'
dòzhia	'little boy'
shègezhe	'they are eating'
wezha	'his/her kids'
nazhaʔeh	'sweater'

All people pronounce [s]

sɪ	'me, I'
siga	'sugar'
ehse	'I'm shouting'
sqòmba	'money'

Some pronounce [s], others [sh]

shɪ	'song'
shìh	'mountain'
shètɪ	's/he is eating'
nɪhshe	'potato'

2. On the use of symbols (alternate pronunciations)2.1 <mb>, , <nd>, <d>

As noted in section 1.3 above, there are two possible pronunciations for words which are spelled with **mb** and **nd**. **Mb** is pronounced as either [mb] or [b]; **nd** is pronounced as either [nd] or [d]. Several additional examples of words spelled with **mb** and **nd** are given below. This is just a small sample.

mb: gomba	'our older sister'	nd: eghàlaehnda	'I'm working'
k'àmba	'ptarmigan'	ndè	'land'
mbehchɪ	'sled, vehicle'	nàehndì ha	'I'll buy it'
tamba	'shore'	gonde	's/he is talking'

2.2 <zh> and <y>

There are a few words which may be pronounced with either the [zh] or [y] sound. These will be spelled with a y, as in the examples below.

yìwò	'homemade bag'
goyii	'inside'

Note that most words spelled with y have only the [y] pronunciation, for instance the words below.

yahti	'priest'
yati	'word'
yehtsɪ	's/he is making it'
eya	'sick'

Some examples of words spelled with **zh** are given below. More examples are found in section 1.7 above.

zhà	'lice'
zha	'snow'
kò gozhqa	'old house'
gozhq	'smart'

2.3 Variant pronunciations with <e>

The vowel *e* easily varies in pronunciation depending on the neighboring sounds ("assimilation"). Three cases were discussed, and it was agreed that the *e* spelling should be used in all these cases.

2.3.1 <e> influenced by a neighboring vowel

e may come to be pronounced identically to the other vowel, retaining its own tone.

jìe	'berry'	compare:	jìewà	'blueberry'
			jìecho	'fruit'
ejie	'cow'		ejiedo	'chocolate, brown'
			ejiet'o	'milk'
fiwe	'fish'		fiwezq	'trout'
			fiék'ɿ	'fish eggs'
daehte	'bed'			
daehchɿ	'chair'			

2.3.2 <e> in prefixes influenced by a rounded consonant <w>, <wh>

e may come to be pronounced with lips rounded.

we-	wetà	'her/his father'
	wedè	'her/his younger sister'
	wets'ò	'to her/him'
	wegàh	'beside her/him'
	weghàehnda	'I see her/him'
	wegha nezɿ	's/he likes it'
whe-	wheda	's/he is sitting'
	whetɿ	's/he is sleeping'
	whék'ò	'it is hot'
	whék'ò	'it is cold'

2.3.3 <e> following <n>

In contraction, *e* may take on the nasal quality of *n*, and *n* as a separate consonant sound is not heard. The nasalized [e] sound may then be influenced by a preceding vowel. The contraction does not occur in the first or last syllable of a word. It commonly occurs in second person singular (you-one person) verbs, for example those below:

k'enembeh	'you swim'	nànetfa	'you go'
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shènetɿ 'you eat'
whenetɿ 'you sleep'

wheneda 'you sit'

2.4 Variant pronunciations with <gh>

The consonant **gh** is easily influenced in its pronunciation by neighboring sounds. Three cases were discussed, and it was agreed that the **gh** spelling should be used in all these cases.

2.4.1 <gh> influenced by a neighboring rounded vowel <ɔ>, <ɔ>

In this situation, the pronunciation of **gh** almost resembles [w].

seghɔ	'about me'	seghò	'my teeth'
seghoo	'my age'	seghoò	'my thigh'

2.4.2 <gh> influenced by a neighboring front vowel <i>, <ì>, <e> <ɛ>

In this situation, the pronunciation of **gh** very closely resembles [y]. Some examples of this are given below.

nàhoehghe	'I played cards'	compare	xà	'cards'
			nàhoehghà	'I am playing cards'
naeghɿ	'it is melting'		naehxɿ	'I thawed it'

Spelling Rule If there is a sound [gh] or [y] which alternates in a word with a related meaning with **gh** or **x**, spell the sound [gh] or [y] as **gh**.

(Note that the pronunciation of **x** is also influenced by neighboring vowels. Compare the sound of **x** before **a** (no influence), and before **o** or **o** (round vowels) or before **i**, **ì**, **e**, **ɛ** (front vowels).

xà	'cards'	xo	'year'	sexè	'with me'
xah	'goose'	xòo	'snare'	xèts'ò	'evening'
mbefexà	'scissors'	tɬ'axɔ	'after'	ɬxèɛ	'yesterday'

2.4.3 <gh> in contraction

In postpositions and postpositional prefixes, **gh** is not pronounced in contraction. A vowel **e** preceding **gh** in the full form will be influenced by the next vowel in the contracted word when the **gh** is not heard.

seggha	nezɿ	'I like it'
wegghènɔ		's/he lost, or was beaten in a game'
wegghàɿchi		'give it to him/her'
egghàlaehnda		'I'm working'

2.5 Consonants sometimes pronounced as [h]

In a number of words, two pronunciations are possible, either using the sound [h] or some other consonant sound. It was decided in general to not use h as the standard spelling in these cases, but to adopt the other consonant.

[satsò] or [hatsò]	spell:	satsò	'metal'
		satsòmbèhchì	'vehicle'
[tatsòga] or [hatsòga]		tatsòga	'raven'
[xat'ò] or [hat'ò]		Xat'ò	'falltime'

3. Word divisions

3.1 Compound words

For compounds, the general principle to be used in writing them is this: if the compound word has its own unique meaning, it should be written as a single word.

lìbalàʔeh	'parka'	ejiedo	'chocolate, brown'
nìht'èkò	'school, office'	T'ìchqò	'Dogrib'
T'èhdah	'Detah'	deghambèh	'razor'
ekwòkwò	'caribou meat'	dzènihtl'èè	'calendar'
edaidzè	'Sunday'		
edaidzèk'ee	'Monday'		
Nàkedzè	'Tuesday'		
Taidzè	'Wednesday'		
Dìdzè	'Thursday'		
Łiwets'edèedzè	'Friday'		
edaidzèt'qò	'Saturday'		

Below are a few examples in which the first, or second element of the compound, or both elements, is an 'inalienable' noun (must be possessed by someone or something, or is an integral part of someone or something). (Inalienable nouns are written with a hyphen before them to show their status as inalienable.)

t'f'àʔeh	'pants'	-t'f'à	'bottom'
Yahtità	'the Pope'	-tà	'father'
mbehwò	'knife sheath'	-wò	'bag, skin'
lidiwò	'tea bag'		
kwàwò	'table cloth'		
kwìgha	'hair'	-kwì	'head'
-kwìghà	'hair'	-ghà	'hair'

-kwìghò	'brain'		
-kwìkw'qò	'skull'	-kw'qò	'bone'
-nìkwò	'cheek'	-nì	'face'
		-kwò	'flesh'

A few examples of other types of complex nouns follow:

wet'à	gok'ets'eetì	'broom'
weyìet'ì		'binoculars'
k'ots'èhchih		'scarf'
ek'ak'q		'candle'

3.2 Negative morpheme

Negative words will be written as in the examples below. The positive word is written with the sequence **-le** at the end to make the negative.

seghàenda-le	's/he isn't looking at me'
eghàlaehnda-le	'I'm not working'
Sqòmbakè nàwhehtfa-le	'I didn't go to Yellowknife'
whetì-le	's/he isn't sleeping'
whékò-le	'it isn't hot'
nechà-le	'it isn't big'

3.3 Past tense

It was agreed that the past tense morpheme will be spelled as the separate word **lè**. For example:

eghàlaenda	lè	's/he used to work'
whetì	lè	'she was sleeping'

3.4 Future tense

It was agreed that the future tense morpheme will be spelled as the separate word **ha**. For example:

shèhtì	ha	'I'm going to eat'
eɬadì	adle ha	'it will be changed'
ts'ehstì	ha	'we are going to make it'
sets'atfa	ha	's/he is going to visit me'

3.5 Combinations of the above

Combinations of the morphemes given above are possible in Dogrib, as can be seen from the following types of examples.

3.5.1 Future + negative

This combination will appear as in the examples below.

shèhtı́ ha-le	'I'm not going to eat'
eładı́ adle ha-le	'it will not be changed'

3.5.2 Past + negative

This combination will appear as below:

weehı́ ı́lè-le	'I haven't seen her/him'
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3.5.3 Future + past

This combination will appear as below:

sqòmba whela kò nı́ehı́e ha ı́lè	'I should have put it in the bank'
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3.6 'can't'/'can'

These meanings are expressed in Dogrib by the use of xa plus diè or diìlè, as in the examples below.

shèhtı́ xa diè	'I can't eat'
shèhtı́ xa iìlè	'I can eat'

The word diè is also used to mean 'too', 'very', or 'really'.

nechà iè	'it's too big'
tekq diè	'it's really delicious'

3.7 The Dene plural morpheme -ke

This morpheme, which is used quite widely in other Dene languages, is used in Dogrib only quite rarely, for example in words like those below. It is always written as part of one word.

ełechike	'brothers'
ełedèke	'sisters'
ełemòqke	'aunt and niece/nephew'
amı́ı́ke	'which people?'
ełezhake	'cow with calf'

3.8 Suffixes

There are a number of morphemes which can be called 'qualifiers' which cannot occur alone in speech, for example, -cho 'huge', -ndeè 'great', -a 'little', -zhq 'old', -tso 'small', ch'ih 'old', and others. (They are often used in nicknames.) In general, these will be treated as suffixes, and written together with the item that precedes them as a single word.

dehcho	'Mackenzie River'	tɬia	'puppy'
mbehcho	'big knife'	dlia	'mouse'
sahcho	'grizzly bear'	chia	'duckling'
ʔahcho	'big snowshoe'	bebà	'baby'
k'àmbacho	'turkey, chicken'	chja	'bird'
ticho	'big lake'	chekoa	'boy, child'
chicho	'mallard'	t'ekoa	'young woman'
tɬicho	'horse'	ts'èkoa	'little girl'
elàcho	'big boat'	kəa	'shed, small house'
təhcho	'bucket, pail'	dəa	'little man'
		dətsoa	'midget'
dzəndeè	'feast day'	tia	'pond, small lake'
tindeè	'Great Slave Lake'	ndia	'small island'
yahtindeè	'bishop'		
kw'atindeè	'chief'	kegòò	'new shoes'
donendeè	'crowd'	mbehchigòò	'new sled'
		chekogòò	'teen-age boy'
təhch'ih	'garbage pail'		
goht'qoch'ih	'rags'		
t'asiich'ih	'garbage'		

There are two types of exceptions, (i) words which seem to be better written as two words, and (ii) words in which the qualifier is prefixed with go-. Examples of these cases are given below:

mamà cho	'(great) grandmother'	kə gocho	'big building'
babà cho	'(great) grandfather'	kə gondeè	'city'
		kə gozhəa	'little old house'
		kə gogòò	'new house'

3.9 Postpositions

Postpositional stems cannot occur alone in speech, but must always be accompanied by a noun (or noun phrase), or a pronoun prefix. When a noun or noun phrase occurs with the postposition, the postposition will be written as a separate word. The pronoun + postposition will be written as a single word.

ts'èko xè	'with the woman'	sexè	'with me'
ladà k'e	'on the table'	wek'e	'on it'
daehte nechàa t'f'a	'under the big bed'	nets'q	'from you'
ehtsèe gha	'for grandfather'	wemqo	'around it'

3.9.1 Compounds with postpositions

When a noun + postposition form a compound noun, this combination is written as a single word, as in the following words for example:

xèhts'q	'evening'	xok'e	'winter'
fik'è	'spring'	tik'e	'water hole'
ejak'è	'window'	sqòmbak'è	'Yellowknife'
mòqlak'è	'buttonhole'		

3.9.2 Postpositions as part of verbs

Postpositions are to be written as part of the verb word when they are considered to be part of the verb in terms of meaning.

bebà k'èndì	's/he is looking after the baby'
yek'èndì	's/he is looking after her/him'
ne?e ts'ànetfà	'visit your uncle'
sets'ànetfà	'visit me'

4. Punctuation

4.1 Capital letters

Capital letters are to be used as in English.

4.2 Punctuation marks

Punctuation marks are to be used as in English, except that quotation marks will not be used, since in the words themselves there is an indication that someone is speaking.

An example is given below of the use of capitals and of punctuation.

Joe hadi, Sachq hoizì nìdè, Dlòndia ts'q t'fì saachi ha.

Joe said, "If tomorrow is nice, the dogs will take me to Dlòndia."

Gwich'in Technical Report

Introduction

The recommendations for standardizing Gwich'in orthography which are included in this report have been ratified by the Gwich'in speakers of Fort McPherson, NWT. The important and fundamental decision that the new orthography (developed in Alaska and the Yukon) should be promoted in preference to the older McDonald orthography has been taken.

Gwich'in is spoken across more political boundaries than the other northern Athapaskan languages. For this reason, and since the dialects are mutually intelligible, decisions concerning orthography standardization should ideally be made by speakers from all dialect areas. Furthermore, decisions need to be taken primarily by those familiar with the issues and by elders. This demands the active involvement of language teachers, and all those who are literate in both orthographies.

Some of the questions which have been addressed in standardizing the Gwich'in writing system include:

- Should Gwich'in speakers in Alaska, the Yukon and the NWT use the same symbols and conventions when writing their language?
- Should variation between speakers within a community and between communities be encoded in the writing system, or should standard, non-variable spellings be used?
- Should redundant information (such as word initial glottal stop) be included in the writing system, and if so, to what degree should the writing system be redundant?
- Should phonetic alternates of a given lexical item be represented in the same way at all times? For example, in Gwich'in, should the different pronunciations of the prefix meaning "my" be written, or should this prefix be written in one consistent way, and language learners be taught that there are different pronunciations possible?

The recommendations given in this report have been guided by several premises:

- That Gwich'in orthography conform as much as is reasonably possible with that of other Athapaskan languages.
- That general linguistic principles influence what might otherwise be arbitrary decisions.
- That any decisions taken be practically feasible, that is that such changes as may be required be implemented with a minimum amount of effort on the part of already literate Gwich'in speakers.
- That already existing writing symbols and conventions be taken into account when making decisions.

1.0 On defining the Gwich'in alphabet symbols

1.1 Replace the symbol < ? > with the symbol < ' >.

The symbol < ? > stands for a sound which is called a glottal stop. It sounds like a popping noise. In Alaska, this sound is written using a single quote mark < ' >. Consonants which are pronounced with a popping noise, also known as glottalized consonants, are to be written with a single quote mark following the consonant symbol. These consonants are: < t' tɬ' tth' ts' ch' tsh' ts' k' n' >.

Standard:	at'an'	leaf
	nin'	moss
	ts'ee nakal'	raspberries
	echi'	corpse, carcass

1.2 Continue to use < kh > instead of < x >.

The sound which has been written using < kh > in Gwich'in is written using < x > in other Dene languages in the NWT. Since the symbol < kh > is also used in Alaska, it is retained for Gwich'in in the NWT.

Standard:	khah	packsack
	kheh	goose
	khòò'	raft

1.3 Continue to write long vowels as double vowels.

Long vowels have traditionally been written as double vowels in all the Dene languages, and so will continue to be written this way.

Standard:	naagaii	beads
	neekaii	two
	aat'oo	birch
	gwi'tshìi	front
	aghòò	eggs
	guuk'ih	their tracks

1.4 Write nasal vowels with a subscript hook wherever they are pronounced.

In the dialects spoken in the NWT, nasal vowels are only pronounced in prefixes (i.e. a part that is added onto the beginning of a word). Compare the following examples from Fort Yukon and Fort McPherson:

<u>Fort Yukon</u>	<u>Fort McPherson</u>	
ʔaʔʔ	ʔaʔʔ	dog
daazraʔʔ	daraii	swan
naagaʔʔ	naagaii	beads

Nasal vowels do not show up in the Fort McPherson dialect except in prefixes, as shown below in these words from this dialect:

aʔtsih	I'm making it
naʔtsih	You're making it
ahtsih	He's making it

For dialects of the NWT, nasal vowels should be marked with a subscript hook wherever they are pronounced.

Standard:	naʔtsih	You're making it
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1.5 Use the symbols < zɾ > and < sɾ > rather than the symbols < zhr > and < shr >.

Use the symbols < zɾ > and < sɾ > instead of the symbols < zhr > and < shr > at all times. This simplifies the writing system.

Standard:	zraii	black
	sriijaa	grayling

1.6 Use the symbols < tʃ > and < tʃ' > rather than the symbols < tl > and < tl' >.

In the other NWT Dene writing systems, these sounds have always been written < dl tʃ tʃ' >. All Dene writing systems, including Gwich'in, also use the symbols < l tʃ >.

Standard:	daatʃih	soap
	tʃ'oo	grass

1.7 Any sequences of glottalized consonant followed by [y] should be written < C'y > rather than < Cy' >.

The single quote mark which follows a glottalized consonant should be written right after the consonant. Since a [y] cannot be glottalized, the quote mark should not follow the [y]. Although Alaskan writers follow this convention, it is inaccurate, and should not be used by Gwich'in writers in the NWT.

Standard:	dinjii zhuh k'yuu	native language
	gwich'yàa'	clothing

1.8 Retain the symbols < u > and < uu >.

While it is possible to write these sounds in different ways, for example as <io> and <ioo>, these changes would be too great for already literate Gwich'in speakers. Therefore the traditional symbols <u> and <uu> have been retained.

Standard:	ɬuk	fish
	dɬuh	cold
	tryuh	otter
	ch'yuh	coals
	gyuu	worm

1.9 Remove the symbols < rʔ >, and < nj > from the alphabet.

The symbols <rʔ> and <nj> should not be included in the alphabet because these are just two consonants in a row which already have alphabet symbols. They can be written using the symbols <r>, <'>, <n>, and <j>.

2.0 On the use of symbols

2.1 Do not write glottal stop at the beginning of a word when the word begins with a vowel.

A glottal stop is always pronounced if a word begins with a vowel. Because we know that a glottal stop will be pronounced if the word starts with a vowel, we do not need to write glottal stop at the beginning of the word. While glottal stop may be difficult to hear at the beginning of words, it shows up clearly when a prefix is added:

'aɬtài'	bow
sha'aɬtài'	my bow

We would always write glottal stop when it is no longer at the beginning of a word, for example:

shi'ik	my jacket
taa'aai	paddle

Standard:	aih	snowshoe
	sha'àii'	my snowshoe

2.2 Write low tone wherever it occurs.

Until recently, low tone was not written by Gwich'in speakers, since fluent speakers could determine which word was meant given two identically spelled words, from the context. However, there are advantages to writing low tone, especially for language learners. It is not possible to predict which vowel will have low tone, and if low tone is marked, the language learner will correctly pronounce a word. An incorrect pronunciation (with high tone rather than low tone, for example) would lead to misunderstanding among his listeners. Additionally, if low tone is not marked, a large number of words which are spelled the same but pronounced differently will result. For example, **shih** would be the spelling for both "bear" and "meat", and without any context, it would not be possible to differentiate the meanings. Even with a context, ambiguity could result.

It is not necessary to mark high tone on vowels since any vowel which is not marked with low tone will have high tone. Low tone is marked above a vowel using a grave accent.

Standard:	zhòh	wolf
	zhoh	snow
	shìh	meat
	shih	bear

2.3 When a word ends in a short vowel followed by a glottal stop, always write low tone.

It is difficult to hear whether tone is high or low on a short vowel before a glottal stop. We have agreed to write low tone on short vowels before a glottal stop, based on what we know about the history of the language.

Standard:	aghò'	someone's tooth
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2.4 Write glottal stop at the end of a word when it follows a short vowel.

Glottal stop should always be written at the end of a word when it follows a short vowel. There are several reasons for this. First, short vowels cannot occur at the end of a word all by themselves. Second, the standard practice in Alaska is to write glottal stop at the end of the word after short vowels, and to mark the vowel as low tone. When glottal stop occurs at the end of the word after long vowels with low tone, it is not written.

Standard: k'i' arrow

2.5 Mark low tone on the first symbol in long vowels, vowel sequences and diphthongs.

In Alaska, we need to mark tone on both symbols in long vowels, vowel sequences and diphthongs because we have rising or falling tones. In the NWT, we do not have falling or rising tones, and so we just mark low tone on the first symbol, for example <ìi òa àii >. (In Alaska, a hachek would be used to mark rising tone, and a caret to mark falling tone.)

Standard: ginìidìk'hìh we are speaking

2.6 Do not write glottal stop at the end of a word when it follows a long low tone vowel.

A glottal stop always is pronounced when there is a long low tone vowel at the end of a word. Because we can predict that there will be a glottal stop after a long low tone vowel, we do not need to write the glottal stop.

We always write a glottal stop at the end of a word when it follows a consonant, for example:

shikwàan' my fire
ezhir' bull moose

A glottal stop is never pronounced at the end of a word when it follows a long high tone vowel, for example:

chúu water

Standard: dàii fly

2.7 Whenever there are two possible pronunciations of a word, spell the word with the [kh] pronunciation.

Older and more conservative speakers often pronounce a word with a [kh] sound, while younger and more innovative speakers use an [h] sound for the same word. For example:

<u>Conservative</u>	<u>Innovative</u>	
khài'	hài'	Thank you
deetokh	deetoh	across

Since the pronunciations in Gwich'in reflect a difference between conservative or older forms, and innovative or newer forms, and since it is generally advisable to retain information about conservative forms, it is recommended that the spellings which reflect the [kh] pronunciation be used.

Standard: deetokh across

3.0 Word divisions

3.1 Write nat/kat, kwah, lee, gwat, ts'at and hah, separate from the word.

The words **nat** and **kat** are plural markers. The word **kwah** is a negative marker meaning "not". It is pronounced **kwaa** when it is not at the end of the sentence. The word **lee** is a question marker. The word **gwat** means "but". The word **ts'at** means "and". The word **hah** is a topic conjoining marker which is used in certain sentence types in the place of **ts'at**.

We recommend that all of these "little words" or particles be written separately in Gwich'in.

Standard:	dinjii nat	people
	Niŋ'in kwah.	I don't see him.
	Dinjik lee t'iinch'uh?	Is it a moose?
	Ahə' nuh, gwat	He said yes, but
	gat'iiniidhan kwah.	he didn't like it.
	Mary, John hah chuuzhih.	Mary went with John.
	Mary, John ts'at	Mary, John and
	Adam uu'an chuuzhii.	Adam went off.

3.2 Write choo and tsal as part of the word when the word has a different meaning than a phrase would have.

The word **choo** means "big", and the word **tsal** means "small" when used in a phrase. The words **choo** and **tsal** can also be used to build new words, in which case they no longer strictly mean "big" or "small". Compare the following examples, the first two of which are phrases, and the second two of which are new words built using either **choo** or **tsal**:

ʔuk choo	big fish
tr'iinin tsal	small child
ʔukchoo	king salmon

Whenever **choo** or **tsal** is added to a word to build a new word, it should be written as part of the word. When **choo** or **tsal** simply describes a word in a sentence, it should be written separately.

Standard:	ʔaiichoo	horse
	chuuchoo	ocean
	tʔ'oochoo	rope
	gwitsal	it is small

3.3 Always write a postposition separate unless it takes a prefix or it cannot be separated from a verb (i.e. it is part of the verb itself).

A postposition is a word which follows a noun, such as **chii**, **kwantat**, or **tr'ih**. Some postpositions include **kak**, **ts'at**, **hah**, and **eenjit**. A postposition is always written on its own, unless it occurs with a prefix, such as **gwi-** in the word **gwits'at**. The only other time a postposition is not written separately is when it is part of a verb, for example the postposition **-na-** in the verb **nah'in'**. The following examples show a postposition written on its own, a postposition written together with a prefix, and a postposition written together with a verb:

John, srii hah ʔuk t'ih.

John cut the fish with a knife.

Gwit'eh tr'ahch'uh gwizhit
ʔuhch'uh dha'aih.

The bread is in the oven.

Mary John nah'in'.

Mary watched John.

Standard:	Mary, chii <u>kak</u> dhidih.	Mary sat on a rock.
	K'eedài' John, Mary <u>ts'at</u> giinkhii.	Yesterday John spoke to Mary.
	John kwantat gwi <u>ts'at</u> ahaa. John tr'ih ts'at gwi <u>nah</u> 'in.	John walked to town. John looks at the boat.

3.4 Always write the formal, slow speech forms of words.

In Gwich'in, as in any language, there is a difference between formal, careful, slow speech and informal, fast speech. Most, if not all, written texts in any language encode the slow speech forms. Compare the examples of slow speech and fast speech given below:

Slow speech

I want to go

Did you eat?

Do you know what
I am going to do?

Fast speech

I wanna go

Djeet?

Y'know what'm gonna do?

While it should be emphasized that fast speech forms are normal, and that in fact, everyone does use informal and formal speech depending on the situation in which he/she is speaking (e.g. a religious speech vs. a chat on the street with a friend), the slow speech forms are preferable to use in writing. The major reason for this is that it aids the language learner in identifying grammatically important parts of words, and in seeing the relationship between words and parts of words.

3.5 Always choose the conservative forms as the standard forms when writing.

In some cases, contracted or shortened forms have become normal for younger speakers of Gwich'in. In these cases, contracted forms should be checked against the speech of elders in a community, in order to determine what the formal speech form would be. Conservative forms are to be chosen in preference to the innovative forms when writing Gwich'in words. The reasons for choosing conservative forms are:

- conservative speech preserves important grammatical information
- conservative forms reflect the speech of elders who are culturally important.

Innovative

t'agwa'ah

tr'it

vichì'

Conservative

t'agwaha'ah

gwi

vitshì'

he will work

he works

his head

3.6 When two parts of a compound word cannot stand alone, they are to be written as one word.

A compound word is a word which is built up of two (or more) words. Nouns, verbs or postpositions can be added together to build a new, compound word in Gwich'in.

Examples of compound words are given below:

Nesrijahch'uu k'anahtih	social worker
they are poor-he takes care of them	

tr'igiikhii zheh	church
they are speaking-house	

gwi'teh tr'ahch'uh	oven
it-under-they cook	

dzih daat'ih	lye
gum-soap	

We always write a compound word as two separate words, unless one part of the compound word cannot be written as a word on its own. For example, look at the following compound word:

ʔukvir	boiled fish
ʔuk	fish
yahvir	he cooks

In this case, one part of the compound, **-vir**, cannot be written as a word on its own. Both parts of the compound word, **ʔuk** and **-vir**, must be written together as one word.

Standard:	dzih daat'ih	lye
	ʔukvir	boiled fish
	ninji'ihthat	I think

3.7 When compounds contain three or more parts, each part is to be written separately.

Whenever a compound word is built up of three or more words, each word must be written separately. In this case, it does not matter whether each part can be written as a word on its own or not.

Standard:	vanchòh nak'òh zhàk dhitin	nine
	tthah tsal dhoh	sewing bag

3.8 Write the possessive prefix as part of the noun.

A possessive prefix is a part added to the beginning of a noun, and carries the meaning "my" or "your" or "his/her", etc. It is always written together with the noun.

Standard:	<u>sh</u> itì'	my father
	<u>ni</u> tì'	your father

4.0 Punctuation

4.1 Use quotation marks. Use English punctuation and capitalization practices.

The standard practice in writing Gwich'in has been to follow English capitalization and punctuation practices. The rules of capitalization are given below:

1. Capitalize the first letter only in a digraph such as:
ch, ch', dh, dl, dr, dz, gw, kw, kh, ng, sh, sr, th, tɬ, tɬ', tr, ts',
ts, ts', zh
2. Capitalize the first letter only in a trigraph such as:
ddh, dzh, ghw, khw, tth, tth', tsh, tsh'
3. Capitalize both parts of a compound word if the word is a proper noun (such as a person's name or place name):

Chuuvee Gwich'in	Aklavik people
Ddhah Zhit Han	Rat River
Teetɬ'it Zheh	Fort McPherson
Drit	man's name

While a question mark <?> is not actually required in Gwich'in because the particle **lee** is used in all questions, it is suggested that writing a question mark may assist language learners. It is recommended that a double space be left between a glottal stop, written <'> and quote marks <"> to eliminate any possible confusion.

Standard: "John, aanaih, jii gwinyah'in," juunuh.
"John, come and see this," he said.

4.2 Gwich'in alphabet symbols and alphabetic order

The alphabetic order and standard symbols of the Gwich'in alphabet are given below. This order should be used in all dictionaries.

'	daa'aii	axe
a	at'àn'	leaf
ai	taih	hill

ao	gaonahtan	teacher
b	bèebii	baby
ch	chii	rock
ch'	ch'ik	plate
d	dinjii	man
ddh	ddhah	mountain
dh	dhik'ii	arctic char
dl	dlak	squirrel
dr	drah	cache
dz	dzan	muskrat
dzh	dzhii	bird
e	eltin	jackfish
eii	gwiinleii	many
g	geh	rabbit
gh	aghòo	egg
ghw	ghwàn	lumpy
gw	gwitsàk	nails
h	han	river
i	ineedzit	bumblebee
j	jak	berries
k	kaiitrih	mukluks
k'	k'àii	willow
kh	khyàh	trap
khw	nakhwanh	us
kw	kwàn'	fire, matches
l	lìdii	tea
ł	łaii	dog
m	mahsì'	thank you
n	niinjii	lynx
n'	nìn'	moss
nd	ndèe	eyes
ng	dàang	four
nh	vahanh	her mother
o	òk	eddy
r	chìiruk	comb
s	san'	star
sh	shih	grizzly bear
sr	srii	knife
t	tah	socks
t'	t'eh	feather

th	thoh	belt
tth	tthah	awl
tth'	tth'an	bone
tʃ	jak tʃoo	berry pudding
tʃ'	tʃ'oo	grass
tr	troo	firewood
tr'	tr'ih	boat
ts	tsèe	beaver
ts'	ts'it	porcupine
tsh	teetshik	creek
tsh'	tsh'yùh	charcoal
u	ʃuk	fish
v	van	lake
y	yakaih	northern lights
z	sriizaii	blunt knife
zh	zhòh	wolf
zr	daazrai	swan

North Slavey Technical Report

I. Introduction: the goals of the committee

North Slavey can be divided into three major dialects, Rádeyɫɫ, Délɫne, and Tulít'a. K'áhbaɫtúé is similar to Rádeyɫɫ. The community of Tulít'a has two major dialects spoken within it. Some speakers use a dialect very similar to that of Délɫne, which can be called the kw dialect, while others use the dialect that is labelled Tulít'a in this report, or the p dialect. Speakers from Rádeyɫɫ and K'áhbaɫtúé use the f dialect. When the statement is made that Tulít'a has certain characteristics, it is generally the p dialect that is focussed on.

The task of devising an orthographic system that is suitable for use across the dialects found within North Slavey was undertaken. Two major issues involved in standardization were considered. The first issue involved questions of orthographic standardization that arise in deciding on orthographic conventions for any language. Specific questions included choice of orthographic symbols, word divisions, and punctuation. The second issue was specific to the multidialectal situation such as that found in North Slavey. The major issue concerned how to deal with variation of sounds both within and between dialects using a phonetically based writing system such as the one used for North Slavey. Various kinds of dialects are found within North Slavey:

- (1) Geographical dialects: People from different areas often speak in slightly different ways. The geographical differences between the North Slavey dialects are quite noticeable. These include the following: (a) speakers from Délɫne use [kw] where those from Rádeyɫɫ use [f] and those from Tulít'a use [p]; (b) speakers from Rádeyɫɫ place high tones on a syllable preceding a verb stem while speakers from Délɫne and Tulít'a have high tones on verb stems; (c) speakers from Délɫne and Tulít'a use [n] where speakers from Rádeyɫɫ use both [n] and [r]. There are also differences in choice of vocabulary. For instance, people in Rádeyɫɫ and Tulít'a use the word ɫɫɫɫ for 'meat' while those in Délɫne use bé.
- (2) Social differences: Different social groups within a society may speak differently. For instance, the speech of young people may differ from that of the elders in some ways. There may be some differences between men's speech and women's speech.
- (3) Stylistic differences: A particular individual speaks in different ways on different occasions. For instance, most people use one style of speech in a formal situation and another style of speech in a less formal situation. For most people, there are differences in style between speech and writing. These stylistic differences may be in terms of sounds, vocabulary, and sentence structure.

With respect to the different types of dialects it was decided not to judge which of the different kinds of dialects is 'correct', but to try to find a writing system that can accommodate all the different kinds of dialects.

The general guidelines used in making decisions about handling the multidialectal situation are stated below:

- (1) In general, a phonetically based writing system is used. Each letter of the alphabet represents a single sound and each sound is represented by a single letter.
- (2) In order to preserve the Slavey language, the written form should be based on the most conservative form spoken as determined by the majority of elders in the community.
- (3) When there are geographically-based differences, the most conservative form of the word found within the community where the material is being prepared is to be written.

II. The North Slavey Alphabet

The letters of the North Slavey alphabet are given below, with an example word from each of the three major dialects. Délne words can also be found in Tulít'a.

	<u>Délne</u>	<u>Rádevııı</u>	<u>Tulít'a</u>	
ʔ	ʔah	ʔah	ʔah	'snowshoe'
a	sah	sah	sah	'bear'
á	bá	bá	bá	'mitts'
ʔ	ʔʔʔalé	ʔʔʔalé	ʔʔʔalé	'black duck'
ʔ	ʔʔhdıı	lʔhdıı	ʔʔhdıı	'seven'
b	bebı	bebı	bebı	'baby'
ch	chʔ	----	chʔ	'rain'
ch'	ch'oh	ch'oh	ch'oh	'quills'
d	dene	dene	dene	'person'
dl	dlıı	dlıı	dlıı	'mouse'
dz	dzá	dzá	dzá	'gum'
e	tse	se	tse	'firewood'
é	tsé	sé	tsé	'button'
ɛ	tɛ	tɛ	tɛ	'ice'
é	whé	wé	fé	'star'
ə	kə	kə	kə	'slippers'
á	tá	tá	tá	'mat'
f	lífaré	lífarı	lífaré	'flour'
g	gah	gah	gah	'rabbit'
gh	ʔeghé	ʔeghá	ʔeghé	'egg'

gw	nágwe	rágwe	----	's/he lives'
h	hetsə	hesə	hetsə	's/he cries'
i	dih	dih	dih	'chicken'
í	jía	jíye	jíe	'berry'
ɬ	k'ɬ	k'ɬ	k'ɬ	'birch'
ɭ	k'ɭ	k'ɭ	k'ɭ	'arrow'
j	jú	jú	jú	'hook'
k	kó	kó	kó	'fire'
kw	kwə	----	----	'rock'
k'	k'o	k'o	k'o	'cloud'
kw'	kw'i	----	----	'mosquito'
l	libó	libó	libó	'cup'
ɬ	náídíɬine	ráídihɬini	náídíɬini	'poison'
m	mɭ	mɭ	mɭ	'net'
n	nóda	nóda	nóda	'lynx'
o	k'o	k'o	k'o	'cloud'
ó	xóe	xóye	xóy	'snare'
q	chq	shq	chq	'rain'
q	kó	kóé	kó	'house'
p	libáp	libáp	'Pope' pə	'rock'
p'	----	----	p'i	'mosquito'
r	túri	túri	túri	'duck'
s	sadzə	sadzə	sadzə	'watch'
sh	shá	shá	shá	'knot'
t	tatsó	tasó	tatsó	'raven'
t'	t'ó	t'óé	t'óli	'paddle'
tɬ	tɬɬ	----	tɬɬ	'dog'
tɬ'	tɬ'u	tɬ'u	tɬ'u	'rope'
ts	tsá	----	tsá	'beaver'
ts'	ts'ale	ts'ale	ts'ali	'frog'
u	tu	tu	tu	'water'
ú	zhú	zhú	zhú	'clothing'
ʋ	ch'ʋa	(rarely found)	ch'ue	'porcupine'
v	----	----	sevá	'my mouth'
w	sewá	sewá	----	'my mouth'
wh	wha	----	----	'sand'

w'	----	w'i	----	'mosquito'
x	xah	xah	xah	'goose'
y	yaht _l	yaht _l	yaht _l	'priest'
z	tehzá	tehzá	tehzá	'polar bear'
zh	zhú	zhú	zhú	'clothing'

III. Defining the North Slavey Alphabet Symbols

1. Mid front tense vowel

There are two mid front vowels in North Slavey, with one tenser and longer than the other. The first is similar in sound to the ai in the English word 'bait.' The other one is similar in sound to the e in the English word 'bet.'

Use ə for the mid front tense vowel currently written as ee, as in the word bə 'knife', unless it is a sequence of e plus e, as in the word wéehkw'ə 'I'm listening'. Use e for the mid front lax vowel as in the word té 'cane'.

The examples below compare words with the vowel ə, the vowel e, and the vowel sequence ee.

- | | | |
|------|----------------------|---|
| i. | tá | 'mat' |
| | cp. té | 'cane' |
| | cp. wéehkw'ə | 'I hear it' (Délíne) |
| ii. | níkenída | 'they arrived' (Délíne, Tulít'a) |
| | cp. k'ínakedé | 'they walk around' |
| iii. | bə | 'knife' |
| | cp. bé | 'food' (Rádey _l l _l) |

2. The sequences ay and oy

The symbol ay should be used rather than ai. The spelling ae can also be used. Possible spellings for words that contain this sequence are given below.

xay, xaye, xae	'winter'
k'áy, k'áye, k'áe	'willow'

The spelling with the y brings out the similarities between the pronunciation xay and xaye and allows the same spelling as the possessed form beghayé 'his/her months, winters'.

The symbol oy should be used instead of oi. The spelling oe can also be used. Possible spellings for words containing this sequence are given below.

xóy, xóye, xóe 'snare'

The spelling with the y brings out the similarities between the pronunciation xóy and xóye and allows the same spelling as the possessed form beghóyé 'his/her snare'.

These two spelling conventions hold when the two sounds are part of the same meaningful unit, and not when they are in different units.

3. Tones

Write high tone (an accent mark over the vowel) where it is heard.

Phonetically, there are mid tones (tones that are higher than low tone, but not as high as high tone) in North Slavey. Only high tone is to be written. Mid tones are predictable from tonal sequences, and do not need to be written in any special way.

shéhítł	'we two eat' (Rádeyłłł)
tłch'adí	'animal' (Rádeyłłł, Délłne)

IV. The Use of Symbols

1. Glottal stops (ʔ)

Write glottal stops whenever they are clearly pronounced.

beʔóné	'beyond it'
feʔq	'it is located' (Tulłt'a)
seʔáwé	'my hip' (Délłne)

There are some circumstances in which a glottal stop is not necessarily heard, but in which it is written.

Write glottal stops in what appear to be vowel-initial words.

ʔah	'snowshoe'
ʔehkə	'boy'
ʔehdzoo	'trap'
ʔeghele	'drum' (Délłne)
ʔelá	'boat'
ʔłt'q	'leaf, flower, green'

There is a test for whether a noun really begins with a glottal stop or with a vowel. If one of the possessive prefixes (se-, ne-, be-, etc.) is put before the noun, the glottal stop will be pronounced when the word is possessed. If the word does not begin with a glottal stop, there will not be a glottal stop present when the word is possessed.

Write a glottal stop between vowels if it can be pronounced in this position.

- i. **pronunciation:** náʔenelu, náenelu 's/he sews'
(Dél̥ine, Tulít'a)
spelling: náʔenelu
- ii. **pronunciation:** beshqʔerihse, beshqerihse 'I broke it open' (Rádeytl̥l̥)
spelling: beshqʔerihse

2. Nasalized vowels

2.1 Writing nasalization

Write nasalization on a vowel when the vowel has distinctive nasalization. In general, in stems a nasal consonant (n, m) is followed by a nasalized vowel (as in examples i-iv). In prefixes, the vowel following a nasal consonant may be oral or nasal (as in examples v, vi).

- | | | |
|------|-----------------|---------------------------------|
| i. | m̥l̥ | 'net' |
| ii. | n̥óda | 'lynx' |
| iii. | n̥ɛ | 'land' |
| iv. | s̥l̥n̥l̥ sen̥l̥ | 'my face' |
| v. | seghán̥l̥ʔq | 's/he gave it to me' |
| | cp. beghán̥l̥ʔq | 'I gave it to him/her' |
| | | (Dél̥ine, Tulít'a) |
| vi. | nágozh̥ə | 's/he plays' (Dél̥ine, Tulít'a) |

2.2 Nasalized vowel-vowel sequences

In the sequence nasalized vowel - vowel, the second vowel may sound nasalized, although the morpheme that it is in has an oral vowel. For example, the word 'my dog' may be pronounced [sel̥l̥é], [sel̥l̥ɛ̃], or [sel̥l̥ɛ̃]. The vowel [é] is a suffix that indicates that the noun is possessed and it occurs in many other words simply as [é]: [sel̥l̥é] 'my dog'. In a word such as 'duck', the pronunciation may be [ch̥l̥a] or [ch̥l̥ã]. The second vowel is a form of the diminutive suffix.

In nasalized vowel-vowel sequences where the second vowel is part of a morpheme that has an oral vowel in other environments, the sequence is to be written as nasalized vowel - oral vowel. For example, write a word like 'my dog' as sel̥l̥é and a word like 'duck' as ch̥l̥a even though they can be pronounced in different ways.

3. Sound Variation within a dialect

3.1 zh-y

There is variation between the sounds [zh] and [y]. Some words can be pronounced with either [zh] or [y]. Some words must be pronounced with [y] and can never be pronounced with [zh]. However, any word that can be pronounced with [zh] can also be pronounced with [y].

If a word can be pronounced with either [zh] or [y], write zh. If it can be pronounced only with [y], write y.

- | | | |
|------|---------------------------------------|--------------------------------|
| i. | pronunciation: zha, ya | 'snow' |
| | spelling: zha | |
| ii. | pronunciation: gózhə, góyə | 'in an area' (Rádeyɬɪ) |
| | spelling: gózhə | |
| iii. | pronunciation: nágozhə, nágoyə | 's/he plays' (Délɪne, Tulít'a) |
| | spelling: nágozhə | |

pronunciation and spelling:

- | | | |
|------|--------------|------------------------------------|
| i. | ʔeghálayehda | 'I work' |
| ii. | yɪʔá | 'I ate it' |
| iii. | begháyúhda | 'I will, want to see it' (Rádeyɬɪ) |

3.2 gh-w

If a word can be pronounced with either [gh] or [w], write gh. Write w if it can be pronounced only with [w].

- | | | |
|-----|-----------------------------------|------------|
| i. | pronunciation: seghú, sewú | 'my tooth' |
| | spelling: segh ú | |
| ii. | pronunciation: sɪghó, sɪwó | 'my nose' |
| | spelling: sɪghó | |

pronunciation and spelling:

- | | | |
|-----|---------|-------------------------------|
| i. | sewá | 'my mouth' (Délíne, Rádeyílí) |
| ii. | k'áhowe | 'boss' (Délíne, Rádeyílí) |

3.3 gh-y

If a word can be pronounced with either [gh] or [y], write gh. Write y if it can be pronounced only with [y].

- i. **pronunciation:** degħə, deyə 'it is calm' (Délġne, Tulít'a)
spelling: degħə
- ii. **pronunciation:** naghġ, nayġ 'it thaws' (Délġne)
spelling: naghġ

pronunciation and spelling:

- i. ʔeghálayeda 's/he works'

3.4 gw-b (Rádeyμlμ)

In Rádey[ɬ], there is variation between the sounds [gw] and [b]. Some words can be pronounced with either [gw] or [b]. Some words must be pronounced with [b] and can never be pronounced with [gw]. Any word that can be pronounced with [gw] can also be pronounced with [g].

If a word can be pronounced with either [gw] or [b], write gw. If it can be pronounced only with [b], write b.

- | | | |
|-----|---------------------------------------|----------------------|
| i. | pronunciation: rágwé, rábe | 's/he lives, stays' |
| | spelling: rágwé | |
| ii. | pronunciation: hígwage, híbage | 'it is light-weight' |
| | spelling: hígwageə | |

pronunciation and spelling:

- | | | |
|-----|------|----------|
| i. | bə | 'knife' |
| ii. | ʔabá | 'father' |

There are a few exceptions. In *ne-* 'you singular', *nə-* 'across', and *ne-* adjectival (*nezq*), [n] is always used in *Rádeyɬɬ* even though there is not a following nasal. In the *Rádeyɬɬ* dialect, write *ɲ* where [n] is heard and *ɽ* where [r] is heard.

4.4 kw-p-f, kw'-p'-w', gw-b-gw, wh-f-w, w-v-w

There are regular sound correspondences between *Délɬne*, *Rádeyɬɬ*, and *Tulít'a* between several sounds. (The *Délɬne* sounds are also found in *Tulít'a*.)

<u>Délɬne</u>	<u>Tulít'a</u>	<u>Rádeyɬɬ</u>	
kwə	pə	fə	'rock'
kw'i	p'i	w'i	'mosquito'
nágwe	nábe	rágwe, rábe	'she, he lives, stays'
wha	fa	wa	'sand'
sewá	sevá	sewá	'my mouth'

Write these sounds as they are pronounced for each dialect.

4.5 ts/s, ch/sh, tʃ/t correspondences

Where an affricate is found in the *Délɬne* and *Tulít'a* dialects, a voiceless fricative is found in the *Rádeyɬɬ* dialect.

<u>Délɬne, Tulít'a</u>	<u>Rádeyɬɬ</u>	
tʃe	ʃe	'oil, lard'
tse	se	'firewood'
ʒehchá (Délɬne)	ʒehshá	'skirt'
ʒɬhchá (Tulít'a)		

Write these sounds as they are pronounced for each dialect.

5. Variation across dialects

5.1 Intervocalic glides

In all dialects, the glides *w*, *y*, *h*, and *ʔ* in prefixes are frequently lost in normal speech.

náʔenelu	náenelu	's/he sews' (Délɬne, Tulít'a)
ʔedeyɬtʃ'é	ʔedeɬtʃ'é	's/he wrote'
ʔeghálayehda	ʔeghálaehda	'I work'
begháyhúhdá	begháuhdá	'I will, want to see it' (Délɬne, Tulít'a)
shéwohtɬ	shéohɬ	'I will, want to eat'

náwohzá	náohzá	'I will, want to hunt' (Dél̄ne, Tulít'a)
tehet̄ta	teet̄ta	's/he went into water' (Dél̄ne, Tulít'a)
k'ínahít'a	k'ínaít'a	'we two walk around' (Dél̄ne)

Write the full form, with the glide in it.

5.2 Lexical items

There are two types of differences in lexical items in the different dialects. First, the same word may be used, with small variations in pronunciation.

(38) <u>Dél̄ne</u>	<u>Tulít'a</u>	<u>Rádeȳl̄l̄</u>	
ʔue	ʔue	luge	'fish'
ʔóe	ʔóe	ʔógé	'eddy'
doo	doe	doge	'sheep'
semíné	sem̄	sem̄lé	'my net'
too	teve	tewe	'night'
nechá	nechá	h̄sha	'it is big'

Second, entirely different words may be used.

<u>Dél̄ne</u>	<u>Tulít'a</u>	<u>Rádeȳl̄l̄</u>	
bé	ʔlȳ	ʔlȳ	'meat'
sqlái	sqlái	lak'e	'five'

Authors write the word the way it is said in their dialect.

There are some forms used primarily by older speakers and other forms used primarily by younger speakers. Some examples are given below.

<u>primarily older</u>	<u>primarily younger</u>	
s̄lá	selá	'my hand'
s̄néné	senéné	'my back' (Rádeȳl̄l̄)
s̄ghó	seghó	'my nose'

There are other cases that are perhaps instances of differences of this sort, or may be better attributable to place of origin or other factors.

dahs̄i, t'ahs̄i, ʔahs̄i	'thing'
gokede or gogede (use of ke- or ge-)	'they speak'
túri - túre	'duck'
ts'ódani - ts'ódane	'child' (Dél̄ne, Rádeȳl̄l̄)

Use the more conservative form. (In some cases, this must be determined by interviewing elders within the community.)

6. Contractions

Some examples of contractions are given below.

<u>full form</u>	<u>contracted form</u>	
beghḡ shéetḡ	bḡ shéetḡ	's/he ate it' (Délḡne)
ṛefeghḡ nakets'u	ṛehgho nakets'u	'they kiss each other' (Délḡne)
nínanehja	níanehja	'I arrived back' (Délḡne, Tulít'a)
rágokezhə	rókezhə, ráokezhə	'they play' (Rádeyḡḡḡ)
dalele	dalel	'floats'
dadí, daudí	dodí	'no'

Use full forms in writing. Teachers must recognize that this does not mean that it is wrong to use contracted forms in speech. The contracted forms can be introduced in the schools later on as part of curriculum development.

V. Word divisions

1. Compounds

Compounds are single lexical items that are made up of more than one word. They function as single items with respect to phonology and meaning. In one type of compound, the words within a compound occur independently. In a second type of compound, one of the words within the compound usually can occur independently, but the second cannot.

1.1 Noun-noun compounds

Write as a single word anything that functions in terms of meaning as a single item, with the exception of long invented forms.

The following compounds should be written as single words.

ṛedḡtl'ékḡé	'school'
zhahtḡkḡé	'church'
ṛahtḡ'u	'babiche'
dechḡtene	'suitcase, wood box' (Délḡne, Tulít'a)
sḡbawé	'wallet' (Délḡne, Rádeyḡḡḡ)
jíetú	'wine, juice'
pígha	'hair' (Tulít'a)
zhúkḡ	'store'
nazhats'a	'toque' (Délḡne)
deshḡtá	'floor' (Rádeyḡḡḡ)
gḡhsimḡlé	'spider web' (Rádeyḡḡḡ)

ʔidikóné	'lightning'
tʔerék'óne	'candle' (Délíne, Tulít'a)
Tsótúé	'Lac la Martre' (Délíne, Tulít'a)
Sóbakóé	'Yellowknife'

1.2 Compounds involving verbs

In general, compounds involving verbs are long, invented forms and should be written as separate words.

bet'á zhú k'enáts'enehtse	'washing machine' (Délíne)
sasóné ráʔerelu	'sewing machine' (Rádeyíłı)
bet'á zhú k'eʔets'edeʔá	'iron' (Délíne)
ʔelá k'ínaret'a	'airplane' (Rádeyíłı)
ʔehtséó Ayah ʔedıhtl'ékó	'name of school in Délíne'

The compounds below should be written as single words, even though they involve verbs, so that they are not confused with the sentence forms.

	<u>pronunciation</u>		<u>spelling</u>
i.	ʔek'arék'óne	'candle' (Délíne)	ʔek'arék'óne
	cp. ʔek'a dék'ó	'fat burns'	ʔek'a dék'ó
ii.	tʔerekwoi	'butter' (Délíne)	tʔerekwoi
	cp. tʔe dekwoi	'the lard is yellow'	tʔe dekwoi

1.3 Noun-postposition compounds

Write compounds consisting of a noun plus a postposition as a single word.

deshıta	'bush' (Rádeyíłı)
xéhts'é	'evening'
kóta	'town'

Note a form such as kóé gocho. This is written as two words. A form such as sahcho, on the other hand, is a single word. (See section 2.)

1.4 Proper names

Proper names are treated like compounds. The first letter of each word of a proper name should be capitalized.

Tsótúé	'Lac la Martre' (Délíne, Tulít'a)
Sahdúé	'Bear island'
Gahmıtúé	'Rae Lakes'
K'áhbamıtúé	'Colville Lake'

Tfegótl
Sóbakóé

'Norman Wells' (Délíne, Tulít'a)
'Yellowknife'

ʔehtséó Ayah ʔedíhtí'ékó name of school in Délíne

2. Noun-qualifier forms

There are words that are made up of an independent noun followed by a stem or by a qualifier as a suffix. These are not really compounds, but are suffixed nouns. However, they fall under the same general guidelines as compound nouns with respect to word division.

Write qualifiers as part of the same word as the stem.

tí'otse	'onion' (Délíne)
íéh'ówá	'bread'
zhahtídéwé	'bishop' (Rádeyílí)
shíhjíré	'punkwood, rotten wood' (Rádeyílí)
dihcho	'turkey' (Délíne, Tulít'a)
sahsho	'grizzly bear' (Rádeyílí)
ʔelácho	'barge' (Délíne, Tulít'a)
gahsho	'jack rabbit' (Rádeyílí)
bəhzhə	'jackknife, pocket knife'
ʔahzhə	'woman's snowshoes'
ʔíts'ézha	'young moose'

3. Possessive constructions

In a possessive construction write the possessor and the possessed noun as a single word when the possessor is a pronoun. If the possessor is a noun, write the possessor and the possessed noun as two words.

sets'aré	'my hat'
selé	'my dog'
bebehshíné	'his, her sled'
yenene ts'aré	'the woman's hat' (Rádeyílí)
dene líé	'person's dog' (Rádeyílí)

4. Postpositional phrases

4.1 Postpositions and their objects

In a postpositional phrase, if the object of the postposition is a pronoun, write the postposition and its object as a single word. If the object is a noun or a sentence, write the object of the postposition as one word and the postposition as a separate word.

sehé	'with me'
bets'é	'to him, her, it'
bet'á	'by means of it'

nóhballi ts'é	'to the tent' (Rádeyɪlɪ)
nóhballi dedele ts'é	'to the red tent'

4.2 Postpositions and verbs

Write postpositions as independent from the verb unless they must always be part of the same word as the verb.

ɪts'é ts'é ʔaketɪ	'they go to the moose' (postposition -ts'é)
tu ts'é tánaréhja	's/he walked back from the lake' (Délɪne) (postposition -ts'é)
sehé nágwe	's/he lives with me' (Délɪne) (postposition-hé)
ts'ére ɪ k'e wéhshu	'the blanket is on the dog' (Rádeyɪlɪ) (postposition -k'e)
ts'óɖani gháyɪda	'look at the child' (postposition -ghá)
gogháníʔq	'I hand it to them' (postposition -ghá)
t'are bebi hek'édí	'the girl takes care of the baby' (Rádeyɪlɪ) (postposition -e)

5. ke (plural collective)

This morpheme is added to a noun or phrase to form a collective or group plural. It is pronounced as part of the same word as the preceding noun. It can also be added to a noun that consists of a whole sentence.

dene ke	'people'
tɪɪ ke	'dogs' (Délɪne, Tulít'a)
yenene ke	'women' (Rádeyɪlɪ)
tɪɪcho ke	'horses' (Délɪne, Tulít'a)
ts'óɖane ke	'children'

dene gháyeyída i ke 'the people I saw' (Rádeyɪɪ)

Write ke as a separate word.

6. Particles

6.1 Particles as separate words

Write particles following nouns and verbs as separate words.

hehɪ gha	'I am going to sing' (Délɪne, Tulít'a)
ʔeko náɬa nɔ	'he went there apparently' (Délɪne)
ʔeyi la	'that particular one'

If there is more than one particle following a noun or verb, write each separately.

shéhtɪ gha íle	'I am not going to eat'
shéhtɪ gha dúyé	'I can't eat'

6.2 Negatives

The negative has various forms: yíle, íle, yíle, íle, and le. (In the last one, the tone of the negative falls on the syllable that immediately precedes it.)

Write all forms of the negative, whether full or reduced, as a separate word.

shétɪ yíle	's/he isn't eating' (Rádeyɪɪ)
radéhɬa yíle	's/he didn't start back' (Rádeyɪɪ)
ʔɔt'é le	'it isn't'
shétɪ le	's/he isn't eating'
nezó le	'it is no good'

VI. Punctuation

1. Capitalization

Capitalize the first letter of a sentence and of a proper name. In a sound written with two or more letters, capitalize only the first letter.

Tsá	'beaver' (Délɪne, Tulít'a)
Kwə	'rock' (Délɪne)

2. Punctuation

Use periods, questions marks and commas as in English.

3. Quotations

Do not use quotation marks. The clause introducing the quotation should end with a comma, and the quotation itself should begin with a capital letter.

Andy kadi na, Sachq nı́dé nadehtł́a gha.
Andy said 'I will go tomorrow'. (Délı́ne)

4. Intonational tones

Do not write intonational tones, but only tones that are part of the word when it does not have a special intonational pattern.

Łéht'éwá nehtsı́? 'You made bread?' (a question where
the expected answer is yes) (Délı́ne, Tulıt'a)

5. Exclamations

A way of making an exclamation is by lengthening the last vowel of the sentence. In writing, repeat the vowel to indicate emphasis.

Łekq. 'It is tasty.' (Délı́ne)
Łekqqq! 'It is really tasty!'

South Slavey Technical Report

A. Defining the Dene Alphabet Symbols

Sounds requiring special (usually non-English) symbols, common to the Dene languages, should be represented by the following symbols:

/dh/, /th/, /ddh/, /tth/, /tth'/, /gh/, /ʔ/, /tʔ/, /tʔ'/, /x/, /zh/.

Further, the traditional diacritics are to be used: high tone for Slavey as in lidí; subscript for nasalization as in golq; and apostrophe for the glottalized consonants in Slavey, /ch'/, /k'/, /t'/, /tth'/, /tʔ'/, and /ts'//.

The alphabet order is that which has become traditional, following as closely as possible the English order.

B. The Use of Symbols

1. Glottal stop (ʔ)

This symbol poses some problems in Slavey, since the nature of the sound is such that in speech it can easily fluctuate in presence or absence word-initially and word-medially depending on environment, intonation, and other conditioning factors. This results in a good deal of ad hoc spelling, depending on whether the writer does or doesn't phonetically perceive the glottal. The one environment where it is consistently pronounced is in its stem-initial position. Because of these considerations, and because the practice of some teachers and writers over the past 20 or more years has demonstrated that no serious problem is encountered in restricting the writing of /ʔ/ to the stem-initial position only, the following decisions were taken:

a. Do not write /ʔ/ / word initially on prefixes. E.g., write

ats'ehʔɩ	not	ʔats'ehɩ
ehtsɩ	not	ʔehtsɩ
ííjɩ	not	ʔííjɩ
óohk'éh	not	ʔóohk'éh
úhk'éh	not	úhk'éh

b. Do not write /ʔ/ / word-medially on prefixes. E.g., write

náenelu	not	náʔenelu
niets'ɩhge	not	niʔets'ɩhge

c. Do not write /ʔ / word finally. Many words whose final syllable has a short vowel are widely pronounced with a final glottal stop. E.g., tsá[ʔ], ke[ʔ], chi[ʔ], náets'edló[ʔ], níts'ichu[ʔ]. This /ʔ / will not be written. Though there are some exceptions to this pronunciation of /ʔ / following a short vowel, e.g., golɔ, dene, sɪ, etc., the native speaker has no difficulty in properly identifying and articulating the written words.

d. Always write /ʔ / stem-initially. This is because (1) it is always pronounced in this position, and (2) the structure of Slavey requires minimally a CV pattern for stems. This rule involves the following:

(1) Write /ʔ / initially on the numerous verb stems which begin with glottal stop. E.g.,

-gháts'ɪʔáh	give
ts'edeʔéh	start out by boat
zhaaʔɪ	he/she saw it
ts'aaʔóh	be drifting

(2) Write /ʔ / initially on the small number of noun stems which begin with glottal stop:

ʔa	fog		
ʔah	snowshoes	meʔaa	his/her...
ʔe	coat, dress	meʔee	his/her...
-ʔeh	uncle	meʔeh	his/her...
ʔeh	beaver dam	meʔeh	his/her...

(There may be one or two more such nouns.)

(3) Write /ʔ / in the small number of postpositional or adverbial words which have a glottal stop initially or medially, since it is consistently pronounced:

ʔóné	beyond, over there
goʔóq	more than
meʔɪɛ	behind it
-nahʔɪ	out of sight
zhúéʔa	upside down

(There are a few more such adverbials or postpositions.)

2. /m/ and /mb/

There is often fluctuation between these two sounds. However, stems must be pronounced and spelled one way or the other: e.g., k'embe "he/she/it swims", and mbeh "knife" require the /mb/; tu emlh "the water is rising" and gomq "someone's mother" must be spelled with the simple /m/.

In prefixes there is free fluctuation: mekóé "his/her house" is pronounced by some as mbekóé; méohdeh "I'll grab (or arrest) him/her" is spoken by some as mbéohdeh. Either spelling will do, but since the /mb/ is never mandatory in prefixes, use of the simple /m/ is encouraged.

/n/ and /nd/

This pair is analogous to /m/ and /mb/. In stems, one or the other is mandatory e.g., gondíh "he/she/it is alive" may not be written (or pronounced) with the simple /n/; likewise ndéh "land" (noun) requires the /nd/. Again, néhnq, "he/she earned/won" must have the simple /n/ in the stem; mení "his/her face" similarly.

In prefixes nekóé "your house" is pronounced by some as ndekóé; nínehtfah "I arrived" is often spoken níndehtfah. In these cases either symbol is permissible, but use of the simple /n/ is encouraged.

A few verb prefixes seem to require the /nd/ rather than the /n/. E.g., the following and possibly a few others:

-ndaaets'edehk'éh	practice shooting
eʔendahts'ɪʔáh	trade, exchange
-ndaáts'ehk'e	hit in the eye

The general rule, then, for /m/mb/ and /n/nd/ is that the monographs /n/ and /m/ are to be written except on stems and a few prefixes where /mb/ or /nd/ is mandatory.

3. /zh/ and /y/

Since there is no meaningful difference between these sounds in Slavey, spelling may be according to preference, though in general /zh/ will be used. Some dialects prefer yah "snow", while some prefer zhah. Some pronounce dézhenézhá "he/she tied it up to something", others déyenéyá.

4. /gh/

In words where this consonant is followed by a back vowel, it may sound like /w/ or /y/. E.g., meghú "his/her teeth" has variously been spelled meyú or mewú; meghqh "concerning him/her" is sometimes written mewqh. Such words should be spelled with the symbol /gh/. In the case of meghú, this decision is supported by the fact that there exists an archaic form xú used in isolation or utterance-initially.

5. /x/ and /h/

In words like xah "goose" and ɬxq̌q̌ "yesterday", some speakers pronounce hah and ɬȟq̌q̌. For such words, either spelling may be used. However, in verb stems like -xeh in nidúhxeh "I'll pick up (the container)", and -xah in edíhxah "it cackles", the /x/ should be used.

6. Disjunct-final /h/

There are two categories of verb prefixes in Slavey. "Conjunct" prefixes exhibit important changes to show differences of tense or actor. E.g., in dehtɬa gha "I'll go", the /ɬ/ indicates "I", contrasting with detɬa gha "he/she will go". But in "disjunct" prefixes, such changes are unimportant: e.g. gohdáhdehtɬah "he/she went down the slope" is no different from godáhdehtɬah or gohdáddehtɬah. Consequently the final /h/ in disjunct prefixes will be written or omitted according to the perceived pronunciation.

7. Nasalization

Nasalization is to be written where it is grammatically meaningful, and is optional elsewhere. For example, ediitɬ'éh "I wrote", is in grammatical contrast with edɬtɬ'éh "he/she wrote".

Often the presence of the phoneme /n/ will cause a vowel to sound nasal. Thus, nóda or ňóda means "lynx" and sení or seňí means "my face". Such nasalization need not be written, but there is no confusion in meaning if it is.

However, in some words it is important to understand the grammar in order to know whether or not to write nasalization. Examples: ɬaáňdhe means "he/she died" while ɬaánidhe means "I died"; gogháňɬq̌ means "he/she gave (it) to them" while gogháníɬq̌ means "I gave (it) to them". (Many native speakers make the first person form clear, avoiding the nasalizing effect of the /n/, by inserting a /d/, thus: ɬaándidhe "I died"; goghándiɬq̌ "I gave (it) to them".)

8. Triple Vowels

In a few words a vowel occurs three times in sequence. In such cases a hyphen is inserted before the third vowel so as to make it clear that this is not a typographical error. E.g.,

nóo-ohtfa I'll go back across (the optative form of nóots'etfa)

k'eé-et'óh He/she paddled along quietly (the perfective form of k'eéts'et'óh)

9. Word-Final Spelling

South Slavey has ten possible patterns with which a word or word-final syllable may end, although if we combine those patterns differentiated by tone alone, we have only five - i.e., combine the following patterns so that (1) and (2) are one pattern, likewise (3) and (4), (5) and (6), (7) and (8) and (9) and (10).

The following charts show the several shapes that a single-syllable word or a final syllable may take. C=consonant and V=vowel. H indicates a vowel with high tone. Square brackets [] enclose word-final glottal stops which are pronounced but not written.

CHART 1 Words ending with glottal stop

<u>Pattern</u>	<u>Examples</u>	
(1) CV[?]	ke	moccasins
	chi	duck
	nóda	lynx
	theda	sit
(2) CH[?]	tsá	beaver
	edé	ice chisel
	agújá	it happened
	meké	his/her moccasins
(3) CHH[?]	medzáá	his legs
	dzáá	bad (situation)
	k'éʔóó	more and more
(4) CVH[?]	medzeé	her heart
	medeé	her younger sister
	mekeé	his tracks

Note: in category 4 the vowel marked with a high tone is not pronounced as a full high tone. But it is higher than a low tone. It seems to be a lowered high tone or what could be called a mid tone, but it is not necessary to create a special tone mark since these words would not be confused with any others.

CHART 2 Words ending with /h/

<u>Pattern</u>	<u>Examples</u>	
(5) CVh	deh dih gondeh gots'eh	river grouse talk and
(6) CHh	edhéh tth'éh gondih k'éndih	moosehide sinew be alive keep

CHART 3 Words ending with a vowel

<u>Pattern</u>	<u>Examples</u>	
(7) CV	dene ezhi odí gúlí	person that one where? it exists
(8) CH	kúlú sǐ kí	but introduces a question not translatable
(9) CVV	mezhaa mechee thaa chųa	her children his younger brother a long time bird
(10) CHV	azhíi ahsíi nozée námbee	what something skunk otter

C. Word Divisions

1. Compound Words

A compound is a word made up of two or more potentially independent words.

Satsóteni "tin can" is made up of satsó "iron" plus teni "pail". Such comparatively short expressions may be written as one word, though the option is open to writing them as two: satsóteni or satsó teni. A few words must be written one way or the other to make the meaning clear: e.g., tsádhéh means "fur" (in the trapping industry), but tsá dhéh means "beaver hide"; t'leelá or t'lehelá means "outboard motor", but t'leh elá means "fuel barge".

Longer expressions should be separated at appropriate junctures which are usually obvious to a mature native speaker's intuition: e.g., met'áh satsóteni dáhkáets'edehthe "can opener" or elá tu zhíe k'et'le "submarine".

2. The Short Form of Íle

The abbreviated form -le "not", from the full negative word íle, modifying a verb, is to be written as part of the verb: e.g., shéet'le "he/she hasn't eaten". If it follows a verb whose stem is -le, it is suggested that the full form íle be written to avoid the impression of a possible error: e.g., goghágeule íle rather than goghágeulele.

Further, if a verb followed by the future morpheme gha is in the negative, it is suggested that the full word íle be written: i.e., shét' gha íle "he/she isn't going to eat" rather than shét' ghale.

3. Suffixes

Suffixes such as -cho "big" as in elácho "barge", and -ah "small" as in chilekuah "young man" or "boy", which are never used in isolation, and would hardly be understood in such usage, are to be written as part of the word they modify.

The pluralizer -keh or -kee (non-obligatory, referring usually to groups of animate beings rather than to inanimate count nouns) is to be in hyphenated attachment to the preceding word: e.g., secho-keh "my parents" or "my ancestors".

When such suffixes are entered in a dictionary they will be shown with a hyphen: e.g., -cho, -keh, -le.

4. Postpositions

These are to be written as separate words, since generally they are identifiable in isolation by native speakers: e.g., *semq gha* "for my mother"; *elá t'áh* "with a boat". This decision is reinforced by the possible syntactic use of a postposition with a phrase, as in *tʃɪ goʔóq nezɪ ésɪɪ gha* "for the best dog", where *gha* relates to *tʃɪ*, not to *ésɪɪ*. (The obvious exception to this rule is seen when the postposition refers to a bound pronoun prefix, as in *seggha* "for me", where *se-* cannot stand alone. See also the next item.)

5. Verb-initial Postpositions

A number of verbs - generally those which take indirect objects - have as their first morpheme a postpositional prefix which "points" to the indirect object. These will be written as part of the verb. E.g., *-ts'áets'ehndíh* "pay", where the initial postposition *-ts'á* points to the one being paid. If this were written separately *- ts'á ets'ehndíh* - it would result in the anomalous word *ets'ehndíh* which does not have meaning in the context of "pay". Likewise with the word *-gháts'enda* "see", if the postpositional prefix *-gha* were written separately, it would leave *ts'enda* which is a word unrelated to the concept "see".

Further, concerning verbs whose initial prefix is a postposition, these will be listed in a dictionary with a hyphen. For example, *káxets'echu* "bring out (from inside an enclosure)" is essentially a complete idea, the prefix */ká-/* being the adverbial "out". But *-káxets'echu* means "go to get (groceries, etc.)", the prefix */-ka-/* being a postposition "pointing" at the thing to be gotten, as in *mekáxets'echu*, or *asɪɪ káxets'echu*. The hyphen will not, of course, be written in ordinary text.

6. Body Parts and Kinship Terms

These classes of words in conservative Slavey are not spoken in isolation: that is, they require a possessive prefix, so that a translation of English "eye" would be *gondaá* "someone's eye", not simply *n daá* (though some innovative speakers may utter such words in isolation). When following a noun or proper noun, such words should be attached to the possessor with a hyphen: e.g. *Mary-mq* "Mary's mother"; *John-gó* "John's arm"; *la dá-dzaa* "the table's leg".

7. Other Dependent Noun Forms

Some independent nouns have a dependent form motivated by morphophonemic changes. For example, the word *shɪ* "song" if possessed becomes *-zhiné* or *-zhɪɪ*, as in *sezhiné* "my song". If possessed by an independent noun, this form will be written separately as in *John zhiné* "John's song". The word *tʃɪ* becomes *lɪé* as in *melɪé* "his dog(s)"; hence, *John lɪé* "John's dog(s)". Such words are to be written separately, and should be entered in a dictionary with a hyphen and with a cross reference to the independent form: e.g., *"-lɪé see tʃɪ"*.

D. Punctuation

1. Quotation Marks

It was decided that quotation marks will not be used because:

- a minimum of diacritical marks is desirable since we must use tone, nasal, and hyphen markings;
- Slavey quotations are clear and unambiguous in their grammatical structure. E.g., Andy kadi, Sachq̄h énidé nadeht̄a gha, ndi. "Andy said, 'I'll go tomorrow', he said." The quotation itself may start with a capitalized word, and be set off by commas, as here exemplified.

2. Commas and Periods

Commas and periods will be used in the same manner as in English. The exclamation point also may be used.

3. Question Mark

The question mark will not be used in sentences having the Slavey interrogative markers s̄l̄ as in S̄l̄ etthé nets'éh "Do you have any meat?" or éll̄ as in íxq̄q̄ j̄q̄ níngt̄ah éll̄ "You arrived here yesterday, did you?" Also in questions signalled by the interrogative prefix /dá-/ as in Dád̄ll̄ndí "What did he/she say?" the question mark will not be used. But in sentences where the interrogative is marked by intonation alone, the question mark will be used, as in Sachq̄ nad̄t̄a gha? "You're leaving tomorrow?"

4. Capitalization

Capitalization will follow the English convention. Where a Slavey utterance, or a proper noun, begins with a digraph or trigraph, only the first letter will be capitalized: e.g., Tthe "rock"; Ts'ah "hat".

E. Other Spelling Questions

1. Contracted Forms

Shortened forms of words, common in everyday speech, may be written, with the understanding that educators will ensure that children and other learners are clearly made aware of the full or conservative forms of such words: e.g., máehnda from megháehnda "I see it"; azhó from adezhó or adezhóné "all".

2. Alternate Pronunciations

Words will be spelled as pronounced. This means that a word having more than one pronunciation may be spelled as spoken: e.g., *ahsít* or *t'ahsít* or *t'ahsíi*, etc., meaning "something". If such pronunciations represent dialect variations, learning materials will explain these variations in appended glossaries. Thus, if a school text produced in Fort Providence is to be used in Fort Simpson, the language specialist will provide a glossary so that a Simpson learner encountering the Providence word *gút t'íé* "vigorously" will find in the glossary that it is the same as the Simpson word *hút t'íi*. Whether a variation like *ts'ahli/ts'ahle* "frog" should be entered in the glossary, would presumably be at the discretion of the language specialists, in consultation with the educators.

3. Identifying Form of the Verb

The term "identifying" is used here rather than "basic" in the interests of accuracy. The minimal, most basic form of a Slavey verb is the third singular imperfective; all other forms are created by the addition of morphemes to this. The form to be used in dictionaries, grammars, literacy classes, etc., to identify a verb includes the morpheme */-ts'e-/* (or variants */ts'í-/* or */-ts'a-/*) signifying an impersonal subject, "someone" or "unidentified people", involved in the action. Thus, *ejt* "he/she/it sings" is the basic form, but *ts'ejt* "singing" or "someone sings" is the identifying form; likewise *-gháenda* "he/she/it sees", *-gháts'enda* "seeing" or "someone sees". This choice of identifying form is because:

- (a) the elders, in formulating new technical words with the advent of European cultural items, commonly employed this impersonal form: e.g., in "can opener" *met'áh satsóteni dáhkáets'edeh* means "one cuts cans open with it";
- (b) while some communities employ the impersonal form with */-ts'e-/* as a first plural, all recognize its use for generalization;
- (c) the generalized form is appropriate since in Dene grammar there is no uninflected form like "sing" in English.

F. Other Considerations

1. Target Group

It was decided that the spelling system should be designed primarily for fluent speakers of Slavey, rather than for the comparatively fluent native child, or the non-fluent learner of the language.

ᐃᑦᑭᑦ ᑎᑎᑭᑯᑭᑦᑕ ᐃᑦᑭᑭᑦᑕᑯᑭᑦᑕ
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